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INSTITUTE OF SOCIAL
MEDICINE

10, PARKS ROAD,
OXFORD

County Borough of Blackburn.



ANNUAL REPORT

UPON THE

Health of Blackburn

AND

ANNUAL REPORT

OF THE

School Medical Officer

For the Year 1947.

BY

V. T. THIERENS, M.B., Ch.B. (L'pool), D.P.H. (Cambridge).

MEDICAL OFFICER OF HEALTH,

ADMINISTRATIVE TUBERCULOSIS OFFICER,

MEDICAL SUPERINTENDENT OF THE CORPORATION ISOLATION HOSPITALS

AND MUNICIPAL MATERNITY HOME,

SCHOOL MEDICAL OFFICER.

BLACKBURN.

THOMAS BRIGGS (BLACKBURN) LTD., 73 NORTHGATE.



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Health Committee.

THE MAYOR (MR. ALDERMAN R. SUGDEN, J.P.)

ALDERMEN—

TOWNSEND, (CHAIRMAN) and CRITCHLEY, J.P.

COUNCILLORS—

BANNISTER

HOLDEN, B. J.P.

Mc.NAMEE

BUCKLEY J.P.

HINDLE

RAILTON

(VICE-CHAIRMAN)

EDDIE J.P.

LOMAX

WHITEHEAD J.P.

BLIND PERSONS ACT COMMITTEE—

THE MAYOR (MR. ALDERMAN R. SUGDEN, J.P.)

COUNCILLOR A. FARMER (CHAIRMAN)

ALDERMEN :

CRITCHLEY, J.P., AND TOWNSEND.

COUNCILLORS :

BEARDSWORTH, BUCKLEY, J.P., GILLIBRAND, HENSHALL,
HOLDEN B., J.P., LOMAX, RAILTON, E., (VICE CHAIRMAN), SUGDEN,

MR. J. CASSON,

MRS. C. ROSCOE, J.P., MRS. WILSON, AND MISS G. M. DEAN, C.B.E., J.P.



PUBLIC HEALTH OFFICE,

BLACKBURN,

June, 1948.

MR. CHAIRMAN, LADIES AND GENTLEMEN,

I beg to present my Report upon the Health of the Borough for 1947. The Report follows the form of the one for 1946 but with the addition of an appendix which sets out the Council's proposals for the purposes of the National Health Service Act and also includes a special memorandum (which you have already considered) indicating the changes in your activities effected by the Act.

The Vital Statistics are again satisfactory, though the birth rate (19.1, the highest recorded in Blackburn since 1921) is lower than the corresponding rates for England and Wales (21.0), and for the 126 great towns (23.92).

The death rate (15.3) is slightly higher than that for last year and those for England and Wales (12.0) and the 126 great towns (13.0).

The Infantile Mortality (41.0), a slight improvement on last year, is better than that for the 126 great towns (47) and the same as that for England.

Whilst one would welcome a substantial fall in the death rate, consideration of that figure in conjunction with the Birth Rate and Infantile Mortality Rate shows a natural increase of population.

An analysis of the causes of death, general and infantile, is set out on pages 18 and 100 of this Report.

Prematurity and congenital defect again heavily weighted the infantile mortality rate and were responsible for almost half the deaths occurring under one year of age.

Whilst administrative measures cannot influence many forms of congenital defect they are capable of reducing the number of deaths from prematurity. In this connection better hospital and home facilities, expert inquiries into the aetiology of prematurity with special reference to local factors would be a helpful addition to our resources and the local obstetrical, laboratory, health and paediatric services should be developed with this end in view.

In previous Reports, in various committees and elsewhere I have "flogged" the paediatric question without result. I make no apology for once again raising this hackneyed topic and drawing your attention to an

important deficiency in the Maternal and Child Health Scheme. The Health and Hospital Advisory Committees are in complete agreement with a proposal, held up for reasons outside local control, that a paediatrician should be appointed. When the Local Hospital Management Committee begins to function, I have little doubt that this project will emerge from hibernation.

Maternal Mortality—There were five deaths of which only three (equivalent to a maternal mortality rate of 1.4) were directly attributable to childbirth the remainder being associated with, but not directly due, to pregnancy or lying in. The rate in 1946 was 0.54, that for England and Wales in 1947, 1.17. An analysis of maternal deaths is set out on P. 98 of this report.

Infectious Diseases—The incidence of infectious diseases has again been low, clinically the cases were of mild type with only two deaths.

The number of cases (155) of scarlet fever were up on the corresponding figure (112) for 1946, but the number of proved cases (5) of diphtheria was a improvement on 1946 (9 cases) the hitherto record year.

There is no doubt that the greatly reduced incidence of diphtheria is the outcome of the immunisation campaign which began in 1929. Before the effects of immunisation made themselves felt, Blackburn, in common with other areas, suffered a high incidence of diphtheria and a heavy death rate from the disease. Perusal of old Annual Reports reveals figures which to-day would be alarming, in comparatively recent years as many as 150 or even 200 notifications being received. The percentage of deaths to cases notified was also distressingly high, in 1910 for instance, the figure was 21.4. Severe laryngeal diphtheria necessitating tracheotomy (an operation which entails the introduction of a tube through an incision in the wind-pipe to prevent choking) now a rarity was then a not infrequent, but always anxious, event. Even in small hospitals, such as Park Lee, the number of cases requiring this operation was such that your medical staff attained a fair degree of proficiency in its performance. I vividly remember the first Christmas period (1928) which I spent in Blackburn when the operation was performed upon some half dozen small infants within a space of four or five days. Operative procedure was not light-heartedly undertaken, but was withheld until all else—heroic doses of antitoxin, constant nursing and medical attention, and every other conceivable form of treatment—had failed, and death from suffocation appeared otherwise inevitable.

I am confident that if the parents of to-day could have witnessed the tragedies associated with diphtheria some twenty or even fifteen years ago a 100 per cent immunisation rate would be achieved.

A recent publication ("Matters of Life and Death") of the Registrar-General sets out in light and popular style some interesting statistical information. Commenting upon the part which the general public may play in the eradication of disease the Registrar writes—"At the beginning of this century year by year some 65 out of every hundred thousand children under 15 were dying of it (Diphtheria), and during the period between the great wars the rate was still 29 and not improving. Then came the immunisation campaign inspired by the Ministry of Health; by 1946 the rate was down to 4 and in 1947 it was only 2. It can be brought lower still if the people choose, but it can be kept down only by sustained effort on the part of the people as a whole."

Whilst it is indeed fortunate that diphtheria has now become a comparatively rare disease, its very rareness obstructs the one measure, namely diphtheria immunisation which is leading to its elimination. For this reason I feel that the immunisation rate is for the time being nearing, if it has not already reached, its peak. That, at any rate, is our experience.

Pathology and Bacteriology—The bulk of the Public Health bacteriological work is concentrated on the Royal Infirmary Laboratory.

Queen's Park is self sufficient as regards pathological work (excluding Wassermann, Kahn, Ascheim-Zondek and Rh factor tests) and is visited regularly by the Borough pathologists who actively supervise and direct Laboratory and Clinical pathology.

The output at Queen's Park showed a large increase compared with 1946. In the latter year 3,698 specimens were dealt with the unit value of which is not available. In 1947, 5,597 specimens were examined with a unit value of 27,753.

The work done at the Royal Infirmary laboratory also showed a marked upward trend, the unit value of specimens examined during 1947 being 101,400 compared with 86,000 units in 1946. The Health Department made full use of the service, the unit value of specimens submitted to this Laboratory being 19,400.

The advantage of readily available laboratory resources cannot be too strongly stressed and the present facilities emphasise the disadvantages of the old scheme under which the laboratory work was "farmed out."

In previous reports I have mentioned the importance of a close personal contact of bacteriologist and public health administrator. In the past there may have been, perhaps, a tendency to regard the bacteriological services as being a mere frill or adornment of the health machine. This is far from being the case as the laboratory service is an essential factor in the investigation, prevention and cure of disease, in the routine supervision of water and food supply and in the hundred and one activities of health administration.

The local services, excellent though they are, have on occasions lacked the resources to deal with certain out of the ordinary contingencies and recourse has been necessary to more specialised departments. In this connection I have in mind particularly the outbreak of neo-natal diarrhoea which afflicted Springfield in 1946-47 and the investigation of material from cases of pemphigus at Queen's Park Hospital and Springfield during approximately the same period. On these occasions the assistance of the Medical Research Council and of the Phage Reference Library were invoked.

If only for such reasons as the two examples above quoted, Medical Officers of Health and laboratory workers alike will welcome the proposal of the Minister to set up (as provided in Section 17 of the National Health Service Act) a bacteriological service for the purposes of infectious disease control.

The Medical Research Council will administer this service (which will be additional to the bacteriological facilities provided at hospitals or elsewhere) on behalf of the Minister and to that end will employ a specialised staff well-skilled in laboratory technique, field epidemiology and preventive medicine.

The new arrangements will be at national level and available to all authorities and laboratories irrespective of administrative boundaries.

Fear has been expressed lest some medical officers of health may regard the National Laboratory Service as trespassing upon their epidemiological preserves. This fear is groundless and I am sure that all medical officers will use to the full any facilities designed to supplement their present epidemiological armamentarium.

The duties of Medical Officers of Health will be drastically altered after July 5th of this year, thenceforward more emphasis will be laid upon the preventive aspects of disease than hitherto. The present close association between the local laboratory service and public health department has furthered the prevention and investigation of many outbreaks of infection. The link-up of the two latter resources with a highly specialised National Laboratory Service will provide even further scope in the field of prevention and research.

Before leaving the subject of bacteriology I would refer to the inadequacy of the local laboratory accommodation. That at Queen's Park was built some twelve years ago, and, though well-equipped, is already overstrained as a result of the calls made upon it since the hospital has become specialist-staffed. The Royal Infirmary laboratory was built during the war by the Ministry of Health and to their specification. Those of us who took part in the negotiations which led to the erection of the new laboratory then expressed strong misgivings as to the extent and quality of the accommodation which was, at the time of its provision, capable of dealing with little more than the pre-war output. Scant allowance was made for the growing use which is invariably made of a new service if, as has been the case, it is efficiently run. Time has justified our fears and the conditions under which the staff work become increasingly difficult and cramped. On July 5th, the Laboratories in question will become the responsibility of the Regional Board who, it is hoped, will find it possible to alleviate the overcrowded conditions which these two important departments suffer.

Sanitary Inspectorial Staff—The approved establishment of the Sanitary Department is 1 Chief Inspector, 1 Deputy Chief Inspector, 1 Meat Inspector, 1 Sampling Officer, 1 Smoke and Factories Inspector, 1 Housing Inspector and 6 District Inspectors. At the end of the year the actual establishment was as under :—

- 1 Chief Inspector,
- 1 Deputy Chief Inspector,
- 1 Meat Inspector,
- 1 Sampling Officer,
- 1 Smoke and Factories Inspector (temporary),
- 4 District Inspectors.

Due to the fact that the Department is understaffed, to the emphasis which the Committee now place on securing the execution of housing repairs specified in Section 9 notices of the Housing Act, and to the large amount of time required to deal with licences for building material, certain aspects of the work cannot receive the attention which they merit.

For instance, bake-houses, cafes, works canteens, and licensed houses should be visited more frequently than present conditions allow ; little is possible in the way of systematic smoke-abatement work and more attention should be given to places of public entertainment.

Repeated advertisements for specialist and district inspectors have been without result, due both to the present universal shortage of sanitary in-

spectors and to the fact than many authorities are offering higher salaries than is the case in Blackburn.

To make good the local shortage four pupil sanitary inspectors who undertook to serve for two years, if so requested, in the Department on qualification, were appointed in June. This will help out to some extent although, naturally, recently qualified men will need a greater degree of oversight than would experienced inspectors.

Mass Miniature Radiography—During the course of this survey, which began in December, 1946, and ended in March of the year under review, 17,812 persons were examined. An analysis of the findings is incorporated in the appropriate section of this report.

When the survey was first contemplated difficulty was experienced in finding suitable premises and, at one time, it appeared that the proposal would fall through.

The directors of Messrs. Phillips, Ltd., then came forward with a generous offer to provide and equip accommodation at their Blackburn works without charge to the Corporation. The Health Committee have placed on record their appreciation of Messrs. Phillips action and I would like to take this opportunity of thanking Mr. de Witt (Managing Director) and also Mr. Korndorffer, whose good offices resulted in such excellent facilities being placed at our disposal.

Staff Changes—Dr. J. Q. Mountain, Deputy Medical Officer, was called up for temporary service in the R.A.M.C. as a Hygiene Specialist in March. He is now serving as Health Officer, Gibraltar.

Dr. J. W. Brown has been appointed temporarily, with the status of Assistant Medical Officer, to act in his lieu as regards the clinical side of Dr. Mountain's work.

Dr. Kathleen M. Fost, temporary Assistant Medical Officer for the maternal and child health service, resigned December 31st, on leaving the district.

Miss Bell, Senior Health Visitor, who has been in the Department since 1924 resigned, on attaining the age limit, in January. A loyal and efficient Health Visitor she saw the maternal and child health service grow from its early and modest beginning to its present developed state. She did much, through her energy and tactful approach to popularise the Clinics, and her knowledge of local conditions and people have been of invaluable assistance to the many maternity and child welfare medical officers who have passed through the department.

MESSRS. H. W. Fowler (Food and Drugs Inspector) and Mr. J. W. Marginson (District Sanitary Inspector) both left the Department on attaining the age limit. The aggregate service of these gentlemen was 99 years, they both worked loyally and well, were conscientious to a degree and their primary interests were those of the Corporation and Town. My best thanks are due to them for their loyal co-operation and I wish them many happy years of well earned leisure.

The introduction to this Report would be incomplete were I not to draw your attention to the manner in which my colleagues in the Health Department have discharged their duties. Whilst one and all have pulled their weight I am particularly indebted to the heads, medical, dental and lay of the various Sub-Departments and to the two senior clerks, Messrs. J. R. Marsden and H. Walsh.

In conclusion may I express my appreciation of the courtesy and support unfailingly accorded me by the members of the Committees responsible for the control of the various services covered by this Report ?

I have the honour to be,

Ladies and Gentlemen,

Your obedient servant,

V. T. THIERENS.

PART I.

Vital Statistics
and
Social Conditions.

VITAL STATISTICS.

	1947
Area (in Acres)	8,080
Population (Census, 1931)	122,697
„ (Estimated middle of 1947)	108,390
Number of Inhabited Houses (1931)	32,696
Number of Families or Separate Occupiers (1931) ..	33,815
Rateable Value	£753,723
Sum Represented by a Penny Rate	£2,995
Rate in the £ (excluding Water) 1947-1948 ..	17/-†
Gross Expenditure on Health Social Services ..	£129,419
Income on Health Social Services	£61,246‡
Net Expenditure on Health Social Services	£68,173

† Subject to 2½% discount for early payment, making a net rate of 16/7d.

‡ This sum does not include any money received through the Block Grant.

Live Births	{ Legitimate . 1981	} M. 1095 F. 980	Birth Rate	19·1
	{ Illegitimate .. 94			

Total... 2075

Number of women dying in, or in consequence of, child-birth, from—

Sepsis	0	{ 0·00 } per 1,000
Other Causes	3	

Still Births 56

Rate per 1,000 total births 26·9

Deaths	{ M. 832 } 1654	Death Rate	15·3
	{ F. 822 }		

Percentage of total deaths occurring in public institutions ... 34·5

Deaths of infants under one year of age per 1,000 live births —

Legitimate 39·9

Illegitimate 63·8

All Infants 41·0

Death rate from Measles (all ages) 0·03

„ Whooping Cough (all ages) 0·02

„ Diarrhoea (under two years of age) 8·19
(Per 1,000 births).

„ Cancer (all ages) 2·33

Births.—The births registered were 2,075, of which 94 were illegitimate. The total male births were 1,095, and female 980. The birth rate was 19·1 per 1,000, compared with 20·5 for England and Wales, and 23·3 for the 126 great towns.

TABLE I.

<i>Year.</i>	<i>Birth Rate.</i>	<i>Death Rate.</i>	<i>Natural Increase</i> <i>1,000 Population.</i>
1928	13·8	12·2	1·5
1929	12·4	14·9	—2·5
1930	12·7	12·8	—0·08
1931	12·4	12·8	—0·4
1932	12·6	12·6	0 008
1933	12·0	14·4	—2·4
1934	12·0	13·1	—1·1
1935	12·0	14·5	—2·5
1936	11·7	14·3	—2·6
1937	11·7	15·2	—3·5
1938	12·2	14·6	—2·4
1939	12·1	15·5	—3·4
1940	12·0	17·2	—5·2
1941	12·6	14·5	—1·9
1942	14·3	14·9	—0·6
1943	15·2	15·9	—0·7
1944	16·7	14·1	2·6
1945	14·4	15·2	—0·8
1946	16·7	14·8	1·9
1947	19·1	15·3	3·8

Marriages.—There were 1,044 marriages solemnized during the year as follows : Established Churches, 477 : other places of worship, 340 : Register Office, 227.

TABLE 2.

WARD DEATH RATES IN RELATION TO PERSONS PER ACRE
AND ROOM SPACE.

1931 CENSUS.

<i>Ward.</i>	<i>Death Rate.</i>	<i>Persons per Acre.</i>	<i>Rooms per Person.</i>
St. Stephen's	14.4	11.2	1.19
Trinity	13.9	53.4	1.09
St. Michael's	14.5	13.7	1.24
St. John's	17.2	64.5	1.22
St. Silas'	18.3	9.2	1.55
St. Paul's	17.0	72.5	1.20
St. Peter's	16.5	46.7	1.01
St. Mary's	12.9	29.5	0.94
St. Matthew's	14.7	81.0	1.11
St. Thomas's	14.8	6.4	1.06
Park	14.4	13.9	1.09
St. Luke's	13.1	43.6	1.08
St. Mark's	14.2	24.7	1.25
St. Andrew's	16.8	9.4	1.09

TABLE 3.

DEATH RATES IN WARDS FOR THE PAST SIX YEARS.

<i>Ward.</i>	1942	1943	1944	1945	1946	1947	<i>Av. for 6 Years</i>
St. Stephen's ..	15.3	13.8	13.5	13.9	12.8	14.4	12.3
Trinity	13.0	18.4	13.4	15.0	14.5	13.9	14.7
St. Michael's ..	17.8	17.5	14.0	17.8	18.3	14.5	16.6
St. John's	14.6	17.4	10.8	14.5	12.4	17.2	14.3
St. Silas's	15.4	18.7	18.9	18.3	18.9	18.3	18.1
St. Paul's	14.3	16.4	14.4	14.8	16.9	17.0	15.6
St. Peter's	15.4	15.4	12.3	16.3	14.2	16.5	15.0
St. Mary's	15.9	17.2	16.0	13.9	11.1	12.9	14.5
St. Matthew's ..	15.3	18.2	13.8	15.9	12.4	14.7	15.1
St. Thomas's ..	14.0	13.2	13.0	13.7	15.6	14.8	14.1
Park	14.6	15.1	15.3	15.1	16.9	14.4	15.2
St. Luke's	12.7	13.4	15.8	12.5	13.4	13.1	13.5
St. Mark's	13.9	15.4	13.0	14.1	15.4	14.2	14.3
St. Andrew's ..	16.0	14.8	13.4	16.8	16.3	16.8	15.7
Borough	14.9	15.9	14.1	15.2	14.8	15.3	14.9

TABLE 4.

VITAL STATISTICS DURING 1947.

WARDS	Popula- tion	Births	Deaths	Birth- Rate	Death- Rate	Deaths under one year per 1000 Births	Death- rate from six Zymotic Diseases excluding Diphtheria	Death- rate from Diar- rhoea	Death- rate from Bron- chitis & Pneu- monia	Death-rate from Pulmonary Tuberculosis	Death-rate from Non-Pulmonary Tuberculosis
ST. STEPHEN'S	11674	244	168	20.9	14.4	37	0.17	0.26	1.97	0.43	0.00
TRINITY	7088	124	99	17.5	13.9	81	0.00	0.14	2.82	0.14	0.00
ST. MICHAEL'S	7587	153	110	20.2	14.5	33	0.13	0.13	2.24	0.40	0.00
ST. JOHN'S... ..	5755	109	99	18.9	17.2	64	0.17	0.17	2.78	0.70	0.00
ST. SILAS'S... ..	8041	109	147	13.5	18.3	27	0.12	0.12	1.87	0.25	0.00
ST. PAUL'S... ..	7880	182	134	23.1	17.0	16	0.00	0.25	2.70	0.51	0.25
ST. PETER'S	5495	76	91	13.8	16.5	66	0.35	0.35	4.54	1.10	0.18
ST. MARY'S	4552	108	59	23.7	12.9	65	0.00	0.44	2.42	0.66	0.00
ST. MATTHEW'S... ..	7570	140	111	18.5	14.7	50	0.00	0.26	3.17	0.66	0.13
ST. THOMAS'S	9939	196	147	19.7	14.8	36	0.00	0.10	2.28	0.30	0.10
PARK	8000	152	119	19.0	14.4	46	0.00	0.13	2.50	0.75	0.25
ST. LUKE'S	6472	115	85	17.8	13.1	52	0.00	0.46	2.32	0.46	0.16
ST. MARK'S	8810	161	125	18.3	14.2	43	0.00	0.00	1.70	0.34	0.00
ST. ANDREW'S	9527	206	160	21.6	16.8	24	0.00	0.42	1.99	0.21	0.21
BOROUGH	108390	2075	1654	19.1	15.3	41	0.06	0.22	2.39	0.46	0.09

TABLE 5.

DEATHS REGISTERED DURING THE CALENDAR YEAR 1947 CLASSIFIED BY AGE AND CAUSE.

CAUSES OF DEATH.	Nett Deaths at the subjoined ages of "Residents," whether occurring within or without the District.												Total Deaths whether of "Resi- dents" or "non- Residents" in Institutions in the District.
	All Ages	Under 1 year.	1 and under 2 years.	2 and under 5 years	5 and under 15 years.	15 and under 25 years.	25 and under 35 years.	35 and under 45 years.	45 and under 55 years.	55 and under 65 years.	65 years and upwards.		
1	2	3	4	5	6	7	8	9	10	11	12	13	
Enteric Fever .....	..	..	..	..	..	..	..	..	..	..	..	..
Small Pox .....	..	..	..	..	..	..	..	..	..	..	..	..
Measles	4	..	1	2	1	..	..	..	..	..	..	2
Scarlet Fever	1	..	..	..	..	..	..	..	..	1	..	..
Whooping Cough	2	..	2	..	..	..	..	..	..	..	..	..
Diphtheria and Croup .....	..	..	..	..	..	..	..	..	..	..	..	..
Influenza	10	..	..	..	..	..	..	1	..	1	8	1
Erysipelas	1	..	..	..	..	..	..	..	..	1	..	..
Tetanus .....	..	..	..	..	..	..	..	..	..	..	..	..
Pulmonary Tuberculosis	50	..	1	..	2	8	14	5	8	6	6	33	
Tuberculous Meningitis	3	..	..	..	2	1	..	..	..	..	..	7
Other Tuberculous Diseases	7	..	..	..	..	..	1	1	..	3	2	8
Cancer, Malignant Disease	253	..	..	..	..	..	3	11	37	71	131	138
Acute Rheumatism and Rheumatic Fever	3	..	..	..	1	..	1	1	..	..	..	3
Cerebro-Spinal Meningitis .....	..	..	..	..	..	..	..	..	..	..	..	..
Encephalitis Lethargica .....	..	..	..	..	..	..	..	..	..	..	..	..
Other Forms of Meningitis (not T.B.)	2	1	..	1	..	..	..	..	..	..	..	3
Poliomyelitis .....	..	..	..	..	..	..	..	..	..	..	..	..
Locomotor Ataxy .....	..	..	..	..	..	..	..	..	..	..	..	..
General Paralysis of the Insane .....	..	..	..	..	..	..	..	..	..	..	..	..
Cerebral Hæmorrhage	77	1	..	..	..	..	..	4	6	12	54	16
Other Diseases of the Nervous Sys'm	40	..	1	..	1	..	2	4	4	7	21	21	
Senile Decay	51	..	..	..	..	..	..	..	..	..	51	10
Organic Heart Disease	272	1	..	..	1	2	3	8	20	35	202	119
Arterio-Sclerosis	226	..	..	..	..	..	..	2	5	33	186	124
Aneurism	2	..	..	..	..	..	..	..	1	1	..	3
Other Diseases of the Circulatory System	83	..	..	..	..	..	..	2	11	19	51	49
Bronchitis, Acute	16	..	..	..	..	..	1	..	..	3	12	..
Bronchitis, Chronic	125	..	..	..	..	..	1	4	11	27	82	39
Influenzal Broncho Pneumonia	3	..	..	..	..	..	..	1	..	..	2	1
Pneumonia (other forms)	117	15	1	1	..	2	3	6	11	26	52	73	
Other Diseases of the Respiratory System	22	1	..	..	..	..	..	3	6	4	8	12
Diarrhœa and Enteritis	24	16	1	1	..	..	..	..	2	3	1	17
Appendicitis, Typhlitis and Peri- tonitis	9	..	..	..	..	..	..	3	..	1	5	16
Cirrhosis of the Liver	1	..	..	..	..	..	..	..	..	..	1	3
Alcoholism .....	..	..	..	..	..	..	..	..	..	..	..	..
Other Diseases of the Digestive Sys'm	30	3	..	..	..	..	4	..	3	5	15	50
Nephritis and Bright's Disease	60	..	..	..	..	..	1	1	6	15	37	43
Other Diseases of the Urinary Sys'm	9	..	..	..	..	1	..	3	..	3	2	17
Puerperal Fever .....	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Pyrexia .....	..	..	..	..	..	..	..	..	..	..	..	..
Other Diseases and Accidents of Pregnancy and Parturition	3	..	..	..	..	1	2	..	..	..	..	6
Congenital Debility and Malforma'n	24	20	..	1	2	..	..	..	..	..	1	21
Premature Birth	26	26	..	..	..	..	..	..	..	..	..	24
Venereal Diseases	2	..	..	..	..	..	..	1	..	1	..	3
Other Diseases of the Reproductive System (Non-Malignant)	7	..	..	..	..	..	..	1	1	1	4	22
Violent Deaths (excluding Suicide)	30	1	..	3	2	3	1	1	2	3	14	27	
Suicide	15	..	..	..	..	..	1	1	5	1	7	3
All other Defined Diseases	44	..	2	1	1	1	3	1	4	10	21	41	
Diseases Ill-defined or unknown .....	..	..	..	..	..	..	..	..	..	..	..	..
All Causes	1654	85	9	10	13	19	40	66	143	293	976	955	

Deaths :—The total number of deaths registered was 1,654, of which 832 were males and 822 were females. The death rate was 15·3 per 1,000, compared with 12·0 for England and Wales and 13·0 for the 126 great towns.

CAUSES OF DEATH

During 1947 the chief causes of death were as under :—

<i>Disease.</i>	<i>No. of Deaths</i>	<i>Deaths per 1,000</i>
Organic Heart Disease	271	2·50
Pneumonia	120	1·10
Cancer	253	2·33
Bronchitis	141	1·30
Pulmonary Tuberculosis	50	0·46

Diseases of bodily systems and group diseases to which death was assigned are as follows :—

<i>Disease.</i>	<i>No. of Deaths.</i>	<i>Deaths per 1,000</i>
Respiratory System (Non-Tubercular)	283	2·61
Circulatory System	582	5·37
Nervous System (Non-Tubercular)	119	1·10
Cancer	253	2·33
Tuberculosis (all forms)	60	0·55
Renal System (Non-Tubercular) ..	69	0·63
Infectious Diseases	18	0·16
Digestive Diseases	64	0·59
Diseases of Babyhood (under one year)	50	0·46
Diseases associated with Maternity .	3	—

TABLE 6.

SITES OF FATAL CANCER.

<i>Site.</i>	<i>Male.</i>	<i>Female.</i>	<i>Total.</i>
Tongue and Mouth	2	2	4
Oesophagus	6	5	11
Other parts of the Buccal Cavity	4	1	5
Stomach	21	26	47
Liver	4	3	7
Bowel and Abdominal ..	14	31	45
Rectum	6	8	14
Bladder	5	2	7
Larynx	1	1	2
Uterus	—	11	11
Other female genital organs	—	12	12
Breast	—	32	32
Pancreas	5	5	10
Kidney	1	—	1
Skin	1	1	2
Lung	21	1	22
Male Genital Organs ..	3	—	3
Gall Bladder	1	4	5
Prostate	9	—	9
Others	2	2	4
TOTAL	106	147	253

TREATMENT OF CANCER

A Radiotherapy Clinic is conducted each week at the Blackburn and East Lancashire Royal Infirmary by a Radiotherapist from the Christie Hospital, Manchester, and any cases considered by him to be suitable for treatment by radium or extensive deep X-ray Therapy are treated at the Christie Hospital, Manchester. At the Blackburn Royal Infirmary there is a new medium X-ray Therapy apparatus and this, in addition to the deep X-Ray Therapy and Contact X-Ray Therapy apparatus which they have had installed for sometime are in full use for selected cases, particularly for superficial conditions, and deep X-Ray Therapy is frequently used in post operative cases.

Facilities are also provided at Queen's Park Hospital for surgical and palliative treatment, and the services of Dr. Macadie are available there. Most cases of malignancy admitted to Queen's Part Hospital, have

had surgical, radium or deep X-Ray treatment elsewhere and are often in an advanced and incurable condition. In a minority of cases, surgical treatment at Queen's Park Hospital is followed up by deep X-Ray Therapy at the Blackburn Royal Infirmary and arrangements are made for the treatment of suitable cases at the Christie Hospital, Manchester.

One hundred and twenty-eight cases of cancer were treated at Queen's Park Hospital during 1947. Details of the sites of the cancer were as follows :—

Buccal Cavity	1
Breast	20
Uterus and Cervix	11
Colon and Anus	26
Stomach and Oesophagus	24
Scrotum	1
Skin	4
Prostate	7
Bladder	4
Pancreas	7
Ovary	3
Lung	9
Larynx	0
Kidney	1
Other Sites	10

HOSPITAL ACCOMMODATION

Queen's Park Hospital. At Queen's Park Hospital there are 58 Maternity beds and 496 beds for the accommodation of the sick.

Voluntary Hospitals. The Blackburn and East Lancashire Royal Infirmary has accommodation for 248 in-patients.

Ambulance Facilities

(1) *For Infectious Cases :—*

The Health Committee provide Two Motor Ambulances.

(2) *For Non-Infectious Cases : -*

Seven Motor Ambulances are available, four provided by the Motor Vehicles Service Station, one by the St. John Ambulance Brigade, and two by the Public Assistance Committee.

The Service is fully adequate for the needs of the Area, and there is close co-ordination between the bodies providing the ambulances.

PART II.

Sanitary Circumstances.

Water Supply. The town is supplied with an upland surface water, the quantity of which is fully adequate for the population served.

Bacteriological examination of both raw water entering the reservoirs and of water leaving the reservoirs after treatment with chlorine are made each week. Three hundred and seventy five examinations were made during 1947, and it was on the rarest occasion only that water leaving the reservoirs was found to be bacteriologically unsatisfactory.

Twelve samples of water were chemically examined during the year and gave "Action on Lead (24 hours)" figures ranging from 0.08 minimum to 0.40 maximum. The average "Action on lead" figure was 0.245. In all other respects the results were satisfactory.

The plant at Bowland referred to in my last Annual report is now in operation and lime is being added to counteract plumbo-solvency. It is, however, too soon yet to indicate the result of the treatment.

Approximately 36,330 dwelling houses, housing a population of 107,000, are supplied from public water mains. There are no standpipes.

Sixty four dwelling houses (including 23 farms and small holdings) are without a main supply. These are supplied by wells and springs.

HOUSING

(a) GENERAL.

Houses built during 1947 :

(i) By Corporation

New houses (prefabricated)	93
„ „ (permanent prefabricated)	46

(ii) By private enterprise

New houses	36
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Total	175
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(b) STATISTICS :

1. INSPECTION OF DWELLING-HOUSES DURING THE YEAR :—

(1) (a) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts)...	2336
(b) Number of inspections made for the purpose ...	11832
(2) (a) Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925 ...	0
(b) Number of inspections made for the purpose ...	0
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation ...	0
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation...	2212

2. REMEDY OF DEFECTS DURING THE YEAR WITHOUT SERVICE OF FORMAL NOTICES :—

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers ...	1394
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3. ACTION UNDER STATUTORY POWERS DURING THE YEAR :—

A. Proceedings under sections 9, 10 and 16 of the Housing Act, 1936 :

(1) Number of dwelling-houses in respect of which notices were served requiring repairs ...	409
(2) Number of dwelling-houses which were rendered fit after service of formal notices :—	
(a) By owners ...	189
(b) By local authority in default of owners ...	62

B. Proceedings Under Public Health Acts

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied ...	291
(2) Number of dwelling-houses in which defects were remedied after service of formal notices :—	
(a) By owners ...	145
(b) By local authority in default of owners ...	0

C. Proceedings Under sections 11 and 13 of the Housing Act, 1936 :

(1) Number of dwelling-houses in respect of which demolition orders were made	...	...	...	...	...	...	...	0
(2) Number of dwelling-houses demolished in pursuance of Demolition Orders	...	...	...	...	...	...	...	0

D. Proceedings Under section 12 of the Housing Act, 1936 :

(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made...	...	...	...	...	0
(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit	...	...	...	...	0

Particulars regarding the control of infectious disease in, and the water supply of, local schools, have been fully described in previous reports.

THE TESTING OF DRAINS.

No. of Smoke Tests	..	..	..	..	..	..	91
No. of Water Tests	..	..	..	..	..	..	26
No. of Colour Tests	..	..	..	..	..	..	68
Breaking Down	..	..	..	..	..	..	31
Total number of Defects found	..	..	..	..	..	..	70
No. of Informal Notices Served	..	..	..	..	..	..	67
No. of Formal Notices Served	..	..	..	..	..	..	21
No. of Defects Remedied	..	..	..	..	..	..	61
No. of Defects outstanding at end of 1947	..	..	..	..	..	..	9

Houses-Let-In-Lodgings.—The number (31) of houses-let-in-lodgings is less than in 1946, when 35 such houses were on the register. These houses provide 175 rooms, of which 96% were occupied, compared with 191 rooms and 92% occupancy in 1946.

Sanitary Inspection of the Area.—The appended Tables classify, in tabular form, inspections carried out by the Sanitary Inspectors during the year, their findings and action taken in respect thereof.

INSPECTION WORK.

TABLE 7.

No. of complaints by Inhabitants	1217
No. of complaints referred from other Departments	91
No. of complaints where no nuisance was found	124

No. of Defects Discovered as Result of :—

Complaints by Inhabitants	5249
Visiting cases of Infectious Diseases	2
Complaints from Other Departments	91
Notifications of H.M. Inspector of Factories	24
Routine Inspection Visits	652
Special Inspections	46
Visits to Factories and Workshops	124
Total number of Defects found	6188
Total number of Defects remedied	5026
No. of Informal Notices served	2252
No. of Formal Notices served	700
No. of Informal Notices complied with	1394
No. of Formal Notices complied with	396
No. of Interviews	373
No. of Letters sent out	242

Particulars of sanitary improvements made and defects remedied under the supervision of the Sanitary Inspectors are contained in the following Table :—

TABLE 8.

DWELLING HOUSES.

Insufficient closet accommodation	4
Water supply improved	25
Cleansed and limewashed	2
Overcrowding abated	0
Damp and defective house, walls, roofs, etc.	549
Defective gutters and down-spouts	605
Cleansing dirty floors	15
" " woodwork	9
" " dirty yards	6
" " bedding	5
" " windows	4
" " gully traps	1
" " cellar areas	0
Obstructive buildings removed	1
Defective sink waste pipes	127
Defective dishstones	8
Waste pipes disconnected from drains	2
Yards and passages reflagged	6
Yards badly paved or flagged	20
Insufficient lighting and ventilation of rooms	9
Defective chimney flues	83
Window sash frames, cords, internal walls, ceilings, floors, stairs, fireplaces, doors, cupboards to be repaired	1626
Dangerous and defective chimney stacks	157
Fractured internal walls	8
Gas pipes repaired	0
Water pipes repaired	162
Yard division walls	46
Defective and bulging external walls	83
Absence of handrails to staircases	53
Outbuildings repaired	113
Washing Accommodation provided	38
Food Cupboards provided	16
Verminous premises	6

WATER CLOSETS.

Cleansed or repaired	180
Cisterns and flushing fittings repaired	58
Provided in substitution of slop-water closets	15

PAIL CLOSETS.

Nuisance abated	1
Converted from privies	0

OFFENSIVE TRADES PREMISES.

Limewashed	0
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COMMON LODGING-HOUSES.

Cleansed and limewashed	4
Other nuisances abated	1

OFFENSIVE ACCUMULATIONS.

Removed	30
---------	----

ANIMALS SO KEPT AS TO BE

A NUISANCE

Nuisances abated	1
------------------	---

SLOP-WATER CLOSETS.

Nuisances abated	22
Converted to W.C.'s	15

ASHPITS.

Abolished	0
-----------	---

ASH RECEPTACLES.

Repaired	0
Portable receptacles provided	284

STABLE PREMISES.

Removing manure	1
Reconstructed middensteads	0

DRAINS.

Re-layed or repaired	61
Cleansed	158
Intercepting traps provided	0
Soil pipes repaired	8
Self-cleansing gullies provided	23

REFERRED TO OTHER DEPARTMENTS.

Street Gullies, etc., to Borough Engineer.....	42
Choked Sewers to Borough Engineer.....	3
Dangerous Walls, etc., to Borough Engineer.....	36
Wastage of Water to Water Engineer	38
Insufficient Water Supplies to Water Engineer.....	11
Gas Leakages to Gas Engineer.....	4

Tents, Sheds, Caravans, Etc. At the end of the year there were 42 caravans in the Borough used as human habitations.

Constant sanitary survey is necessary if the caravans and their surroundings are to be kept in a cleanly and sanitary state.

The general cleanliness of the travelling vans which came to Blackburn during the Easter holidays was satisfactory.

The bye-laws in force are adequate.

Offensive Trades. The number of offensive trades within the Borough is sixteen. These consist of 8 Bone and Rag and Bone Dealing, 3 Fat Extracting, or Fat Rendering, 1 Gut Scraping and 4 Tripe Boiling. There are also two Knackers Yards. All these are visited regularly.

Insanitary Dwellings. During the year 3 houses were closed pursuant to Section 111 of the Blackburn Improvement Act, 1882. Despite numerous repairs to working-class houses which had been carried out after notice from the Department, the position regarding property repairs is as acute as ever. Labour and materials still continue to be in very short supply and much of the working-class property has so deteriorated that it can only be properly dealt with by Slum Clearance.

Verminous Premises. During the year 53 private dwelling houses comprising 198 rooms have been disinfested by officers of the Health Department. In only one case was re-treatment necessary. The insecticide used was a product containing D.D.T. and pyrethrum, this combination having a quick "knock out" effect plus a residual toxicity.

Scabies. The treatment of scabies has again been carried out at the Clinic at Blakey Moor.

Careful watch for scabies is kept at the School Clinics and during medical inspections at Schools. Whenever a case is found and treated, the other members of the family are invited to attend for a precautionary treatment. Local medical practitioners make full use of the Clinic by sending for treatment cases which they find in the course of their practice.

166 persons received two treatments comprising ...	332 baths.
8 persons received one treatment comprising ...	8 baths.

Total number 340 baths.

These figures show a great reduction in the number of cases treated compared with 1946 when the total baths was 614.

In addition 14 persons were cleansed for body lice.

Common Lodging Houses. At the beginning of the year there were six premises in use as Common Lodging Houses, although the Keepers of two of these had been notified that their applications for the renewal of Registration had been refused following inspections of the premises by the Health Committee. As the two premises continued to be used as Common Lodging Houses, proceedings were instituted against the Unregistered Keepers who were fined £1 in respect of each house and the Houses were ordered to be closed as Common Lodging Houses. These have now been deleted from the register.

During the year three new applications for Registration were approved, so that, at the end of the year there were seven Common Lodging Houses in the Borough providing accommodation for 226 male persons.

All Common Lodging Houses are visited weekly and the standard of cleanliness at the majority is satisfactory. The Bye-laws relating to these premises are adequate.

Smoke Abatement.—The position regarding smoke abatement is one which is becoming progressively worse. In my last annual report I referred to the difficulty encountered by factory owners due to poor quality coal, and to the renewal of worn out plant. The cotton industry is one which is vitally concerned in the export drive and output is increasing. In consequence, boiler plant is, in many cases, becoming more and more overloaded, and until better coal becomes available and worn out plant is replaced, little improvement can be anticipated as regards smoke nuisance.

During the year, 29 smoke observations have been made. By resolution of the Council, emission of black smoke is permitted for not more than four minutes during any one hour in the case of one boiler, five minutes for two boilers, 6 minutes for three boilers, and seven minutes for four or more boilers.

In two cases black smoke was emitted for a much longer period than that permitted. The Management concerned were interviewed, resulting in an improvement in both cases.

Canal Boats. The Corporation have carried out, within their District, the provisions of the Public Health Act, 1936 (Part X).

- (1). An Inspector appointed for the execution of the Act was maintained in Office throughout the year.
- (2). Twenty-two Canal Boats were examined and reported upon.
- (3). On two canal boats four infringements of the Act came under the notice of the Inspector, namely :
 - (a) Inadequate ventilation of the fore cabin.
 - (b) The Certificate of Registration was not produced.
 - (c) Painting of the Cabin was overdue.
 - (d) The cabin was not weatherproof.
- (4). There was no occasion to take legal proceedings.
- (5). Two written intimations were served on the owners of Canal Boats relative to infringements in item 3.
- (6). No cases of Infectious Disease were met with.
- (7). There was no detention of boats for cleansing and disinfection.
- (8).
 - (a) Three new boats were Registered during the year.
 - (b) Four boats were Re-registered on account of structural alterations.
 - (c) At the end of the year there were twenty-two boats on the Register which were in use or available.

Factories Act, 1937, and the Sanitary Accommodation Regulations, 1938.

It is the duty of the Local Authority to enforce the provisions of the Act and Regulations dealing with sanitary conveniences in all factories and in the case of factories where mechanical power is not used, the provisions dealing with cleanliness, overcrowding, temperature, ventilation and drainage of floors.

There are on the Register 818 power factories and 230 non-power factories. During the year 50 factories have been inspected. Where contraventions of the Act were found, the occupiers of the factories concerned were notified, and requested to take appropriate steps to comply with the Act. The position regarding building labour and materials has not improved and, in consequence, a considerable period has to be allowed for the carrying out of alterations.

Table No. 9 sets out in detail the particulars of inspections made and of the contraventions found and dealt with.

DETAILS OF INSPECTIONS MADE.

Table 9.

	Power	Non-Power
Number of factories on the Register	818	231
Number of factories inspected	42	8
Number of re-visits to factories	240	31
Number of factories found satisfactory	14	1
Number of factories where contraventions were found	38	7
Number of factories where contraventions have been remedied	36	2

CONTRAVENTIONS OF THE FACTORIES ACT, 1937
AND
THE SANITARY ACCOMMODATION REGULATIONS, 1938

	Number of Contraventions found	Number of Contraventions remedied
<hr/>		
Sect. 1. CLEANLINESS.		
(a) Accumulations of refuse	0	0
(b) Walls, partitions, ceilings not clean ...	2	2
Sect. 3. TEMPERATURE.		
Effective provision not made for maintaining a reasonable temperature	0	0
Sect. 7. SANITARY CONVENIENCES.		
Absence of sanitary conveniences	2	2
Sufficient sanitary conveniences not provided	4	2
Suitable sanitary conveniences not provided	2	0
Separate sanitary conveniences not provided for each sex	3	1
Sanitary conveniences not effectively lighted	34	31
Sanitary conveniences not maintained in proper repair	5	6
Sanitary conveniences not kept clean	14	20
SANITARY ACCOMMODATION REGULATIONS, 1938.		
Sanitary conveniences not ventilated	8	7
Sanitary conveniences in direct communication with the workroom	26	17
Sanitary conveniences not provided with proper doors	1	4
Sanitary conveniences not provided with proper fasteners	17	29
Sanitary conveniences not conveniently accessible		1
Sanitary conveniences not provided with separate approaches	0	0
Sanitary conveniences not effectively screened	7	7
Sanitary conveniences not indicated with sex of users	4	8
Insanitary urinals	0	6
TOTAL	129	143

Details of Inspection.

Schools	9	Ashes Receptacles	64
Tents, Vans, Sheds	31	Food preparing and storing Places	215
Power Factories	282	Outworkers Premises	28
Non-power Factories	39	Dwelling Houses	4434
Bakehouses—ordinary	0	Insufficient water supply	639
Cowsheds	216	Miscellaneous	851
Dairies and Milkshops	640	Merchandise Marks Act	630
Ice Cream Premises	342	Routine (work in progress) ...	7398
Offensive Trade Premises	22	Applicants: Corporation houses	517
Common Lodging Houses	180	Houses let-in-lodgings	679
Offensive Accumulations	30	Dirty Houses	99
Animals so kept as to be a nuisance	1	Common yards, Back roads, and Passages	16
Street Gullies	42	Infected Houses	247
Canal Boats	22	Small Pox Contacts	388
Smoke Observations	29	Typhoid Contacts	39
Theatres and Cinemas	32	Food Poisoning	14
Building Licences, etc.	1395		

Rodent Control. The control of rat and mouse infestations has been effectively maintained during the year. The end of March saw the completion of the Special Scheme which was begun in September, 1946, at the request of the Ministry of Food. This Special Scheme entailed a complete Survey of all premises within the Borough and subsequent treatment of all infestations found. For this purpose a staff of twelve Rodent Operators was employed under the direct supervision of a Sanitary Inspector. The following table sets out a summary of the work carried out under the Special Scheme from September, 1946, to March, 1947.

TABLE 10.

Blocks Surveyed ...	...	...	...	...	297
Blocks Treated ...	...	...	...	...	297
Premises Surveyed ...	...	...	...	...	44297
Premises Treated...	...	...	...	...	1259
Estimated number of rats killed	...	...	...	...	3980
Estimated number of Mice killed	...	...	...	...	5291

Since March, five Rodent Operators have been employed on Rodent Control in the Borough. Careful search for rats and mice has been continued and all infestations found have received treatment. Special attention was given to parts of the Rivers Darwen and Blakewater which were twice treated, to the Leeds and Liverpool Canal which was treated once throughout its length and to those premises which are liable to become re-infested such as Corn Mills, Canal Wharfs, Tips, etc. One point of interest which arose was that

the Corporation Tip at Feniscowles, which had previously been comparatively clear of rats became fairly heavily infested during the year. This was probably due to the increase in the quantity of organic matter tipped there whilst the refuse Destructor was out of action.

Table No. 11 sets out the details of the premises surveyed and treated from April to the end of the year together with the results.

Complaints received	...	...	...	...	...	186
Blocks surveyed	...	...	...	...	...	227
Blocks treated	...	...	...	...	...	227
Premises surveyed	...	...	...	...	...	33232
Premises treated	...	...	...	...	...	383
Estimated number of rats killed	...	...	...	...	...	1694
Estimated number of mice killed	...	...	...	...	...	1053

The foregoing information applies only to surface rodent control. The control of rodent infestations in the sewers is exercised by the Borough Engineer. During the year maintenance treatment was carried out under his supervision in April and September respectively. As no check was carried out on the amount of poison bait taken, it was not possible to estimate the number of rats killed, but 250 bodies were picked up at the Witton and Samlesbury Sewage Works following the April treatment and 100 bodies following the treatment in September. As these numbers probably represent only a small proportion of rats destroyed the actual kill would be much higher.

PART III.

Food Supply.

ICE CREAM

The number of Premises registered for the manufacture, sale, or storage for sale of ice-cream increased during the year. During 1947, 13 applications for registration were received. Ten were registered, two were refused registration and one application was withdrawn by the applicant. At the end of 1947 the Register of the above premises showed the following alterations :

Number on Register 31st December, 1946.....	90
Number of Registrations discontinued during 1947.....	3
Number of premises Registered during 1947.....	10
Total on Register, 31st December, 1947.....	97

On the first of May, 1947, the Ice-Cream (Heat Treatment) Regulations became operative, and required that Ice-cream shall be manufactured in one of two methods. The first consists of an ice-cream mix which requires heat treatment, and the second, known as a "Complete Cold Mix" which may be manufactured into Ice-cream with the addition of water but without heat-treatment.

The structural and hygienic conditions of the premises used for the manufacture, sale, or storage for sale of Ice-Cream, are controlled by Section 13 of the Food and Drugs Act, 1938, supplemented by Article 5 of the 1947 Regulations, which requires that Ice-cream must be protected from dirt and contamination, and that all utensils used in connection with the manufacture, sale, or storage for sale of ice-cream must be kept clean.

Prior to the Regulations coming into force, judgement of the bacteriological condition of ice-cream was based on bacterial counts and coliform tests. The Minister of Health has, however, recommended in the 1947 Regulations a form of Methylene Blue Test which, he states, is, at the present time, the best available for the purpose, and that the results of the Methylene Blue Tests should be graded in Groups from 1 to 4. Samples falling in Groups 1 or 2 are to be considered satisfactory, and samples in Groups 3 or 4 unsatisfactory.

Since the Regulations became operative in May last samples of Ice-cream were obtained each month until the end of October. A total of 91 samples was taken during this period, and below will be found tabled reports and analyses of results of bacteriological examination.

Monthly report on Samples obtained during the Year 1947

Month	Number Obtained	Number in Groups 1 or 2	Number in Groups 3 or 4	Percent. Passed	Percent. Failed
May & June	18	9	9	50	50
July	22	4	18	18.18	81.81
August	19	6	13	31.57	68.42
September	17	15	2	88.23	11.76
October ...	15	13	2	86.66	13.33
Totals	91	47	44	51.65	48.35

All samples were submitted to a Coliform Test, the results of which are set out below :

Month	Number Tested	Number Passed	Number failed	Percent. Passed	Percent. Failed
May & June	18	14	4	77.77	22.22
July	22	8	14	36.36	63.63
August	19	8	11	42.10	57.89
September	17	15	2	88.23	11.76
October ...	15	11	4	73.33	26.66
Total for y'r.	91	56	35	61.53	38.47

Appended is a brief report by Dr. M. S. Spink, Borough Bacteriologist, on the results of his examinations during 1947 :—

“In all 106 samples are considered in this account. We adopted throughout the methylene blue decolourisation method suggested by the M.R.C. (not however statutory, but still under trial) as the basis for grading samples.

Seventeen were described as made by the cold mix method and of these 7 (40%) were grade 4 : 5 (30%) grade 3 : 4 grade 2 : and 1 grade 1. Sixty-six were “hot mix” ices and were classified as follows : 21 (32%) grade 4 : 12 (18%) grade 3 : 15 (23%) grade 2 : and 18 (27%) grade 1. Twenty three were sent in without note as to mode of manufacture, of which 11 were grade 4, and 4 were grade 1.

Comparing methods of manufacture, cold mix methods yielded 30% in the two higher grades, while hot mix yielded 50% in the two higher grades. This is rather the reverse of our findings last year, but both years we have had relatively small numbers of cold mix ices examined, and the sampling error is relatively enormous. This year's experience in any case agrees with the general finding that hot mix methods are safer in the hands of the small maker, who predominates in this borough. Last year in the absence of any government or other high level ruling, we set up standard gradings of our own. It is not easy to compare the results with last year's *three* grades, with those obtained by the current *four* grade standard, all that can be usefully noted is that last year 50% of samples were in the top grade, contrasted with only 22% this year : while 34% of last year's were in the bottom grade compared with 37% this year. We believe that the method of examination and grading at present recommended, and used by us, is rather too stringent. This method takes no account of B. Coli content ; we therefore as a matter of interest examined all samples for B. Coli in addition. By this it was found that 4 out of the 23 grade 1 samples would have been downgraded

by our former standard, and that 10 out of 39 Grade 4 would have been upgraded by that standard. On these findings it is thought that, although the Methylene Blue reduction method runs reasonably parallel with B. Coli determination, the latter is worth while doing additionally to the reduction. However, the merits or faults of any proposed method of examination and grading can only be fully evaluated on a scrutiny of a far larger number of samples than would be handled in this Borough."

To enable manufacturers to comply with the Regulations it will be necessary for them to either instal apparatus to secure adequate heat treatment or to obtain a complete cold mix, and all manufacturers have been so notified in writing, the written intimation being followed by a personal visit from the Sampling Officer to explain the requirements of the Regulations.

The 1947 Regulations laid down the procedure to be followed in heat treatment and subsequent cooling. It was a defence for a defendant charged with an offence alleged to have been committed before May 1st, 1948, to prove that before the date of the alleged infringement, suitable apparatus had been ordered but had not been delivered and that he had taken all practicable steps to comply with the Regulations. The Ice Cream (Heat Treatment) Amendment Regulations, 1948, extend this period of grace until 1st May, 1949.

Three hundred and forty two visits were made to Registered Premises during the year, twelve verbal notices were given, and three letters sent to occupiers whose premises were considered unsatisfactory. Particular attention has been paid to the hygiene of preparing rooms, and it is hoped that the coming year will show a gradual and progressive improvement in the conditions under which Ice-cream is manufactured.

One hundred and forty seven chocolate ices, and two half gallons of ice-cream were destroyed after the temperature had been raised during storage above that stated in the Regulations.

Court Proceedings were instituted during the year against a person for manufacturing Ice-cream on un-registered premises. This person had made two applications for Registration previously, which had been refused, owing to the reported general unsuitability of the premises. The case was proved and the Bench fined the Defendant £5.

Ice-cream Chemical Examination. Fourteen samples were taken and examined by the Public Analyst. The fat content varied in the samples from 0.15% to 7.9%. Average fat content for the samples was 2.88%. At the present time there is no legal chemical standard for Ice-cream. It has been suggested, however, that when supplies again become normal, a standard of 10% fat, and 21% solids not fat, should be made a legal obligation on all manufacturers.

Cowsheds. There are 55 farms in the County Borough of Blackburn at 50 of which milk is produced, and the remaining five carry on various other branches of farming work. At the end of 1947 the Register of cowsheds showed the following alterations :

Number on Register, 31st December, 1946.....	49
Number of registrations cancelled during 1947.....	0
Number of new registrations during 1947.....	1
Total on Register, 31st December, 1947.....	50

183 visits were made to farms during the year, in connection with the enforcement of legislation controlling the production of milk. Nineteen verbal notices were given and four letters sent to producers who failed to comply with the Milk and Dairies Orders.

Dairies.

Number of premises on Register, 31st December, 1946.....	12
Number of registrations cancelled during 1947.....	1
Number of premises registered during 1947.....	0
Total on Register, 31st December, 1947.....	11

142 visits were made to dairies in 1947 for the purpose of inspection and supervision. Six verbal notices were given and two letters sent in connection with contraventions of the Milk and Dairies Orders.

Milk (Special Designations) Orders, 1936 - 1946. The special grades of milk which are produced and sold in Blackburn consist of Tuberculin Tested, Accredited and Pasteurised. In addition a large amount of Sterilised Milk is sold in the Borough. All producers of the foregoing grades of milk are required to comply with the requirements of the Milk (Special Designations) Orders in relation to bacterial content, and the efficiency of heat treatment.

During the year a total of 750 samples of milk were submitted for bacteriological examination. This figure includes designated and non-designated milk.

Pasteurised Milk. There are three pasteurising plants in the Borough, two deal with fairly large quantities of milk, whilst the other, a small plant, is rarely used. Large quantities of pasteurised milk are imported into Blackburn from a neighbouring pasteurising firm. Ninety nine samples were bacteriologically examined and submitted to the phosphatase test. All samples passed the phosphatase and methylene blue tests, whilst eight failed to pass the test for coliforms. The majority of coliform failures came from a local firm. Investigations revealed a defect in a milk storage tank, and as soon

as this was remedied there was a noticeable improvement in the bacterial quality of the milk.

Tuberculin Tested Milk. Two farms in Blackburn are licenced to produce tuberculin tested milk, and the herds at both farms are on the Ministry of Agriculture and Fisheries Attested Herd Register. Five producer/retailers of tuberculin tested milk deliver in Blackburn, and milk from eight farms is brought to a local dairy where it is bottled prior to delivery to the consumer. Sixty four samples of milk were submitted to the methylene blue and coliform tests. Of these, fourteen failed to pass the tests. The local farms have been visited when necessary, and producers advised on methods of production. With regard to the tuberculin tested farms outside the Borough, the Medical Officer concerned was notified of any unsatisfactory samples.

Accredited Milk. A great deal of the accredited milk which is produced, is not sold as such, but goes to dairies. There are twenty one accredited producers in the District, eleven of these being in Blackburn, and two of the eleven farmers are wholesalers only. 116 samples were obtained and submitted for bacteriological examination. Of these samples, eighteen failed to reach the required standard. The same procedure was adopted in the case of unsatisfactory samples as for tuberculin tested milk.

Sterilised Milk. This milk is not designated under the Milk (Special Designations) Order, but is required to pass the tests as applied to pasteurised milk. A local dairy sterilises a considerable gallonage of milk daily, and further supplies are brought into Blackburn from an outside dairy. Thirty-three samples were examined during the year, and all reported satisfactory.

Non-Designated Milk. There is no standard laid down by legislation for this milk. 242 samples were taken during the year for bacteriological examination. Of these, 56 failed to reach the standard adopted by this Department. These samples were taken in connection with the Clean Milk Competition.

Tubercle Bacilli. 196 samples of milk were taken and examined for tubercle bacilli, of which 8 gave positive results. These were reported to the Ministry of Agriculture and Fisheries.

Clean Milk Competition. There are four classes of competitors for the clean milk awards.

A silver cup is awarded in each class and is held by the winner for one year. He also receives a miniature cup and gold brooch for his wife, both of which are retained.

Class 1 is open to producers of raw designated milks purveyed in Blackburn. The award in this class is the "Redmayne" Cup. The winner for 1947 was J. Sedgewick, Elswick Farm, Mellor. The second prize winner was J. Holgate, Kayfold Farm, Ramsgreave, and the award was the Feilden Cup.

Class II is open to producers of non-designated milks purveyed in Blackburn. The award in this class is the "Porritt" Cup. The winner for 1947 was A. Mickle, Tockholes Fold Farm, Tockholes. The second prize winner was A. Kinder, Brundhurst Farm, Mellor, and the award was John Redmayne Tiller Cup.

Class III is open to producers of designated milks whose main source of livelihood is dairy farming. The award in this class is the Burke Cup which was won by J. Mares, Aspinall Fold Farm, Blackburn.

Class IV is for the best undesignated dairy farm under the same conditions as Class III. The winner for 1947 was J. Todd, Lea Farm, Rishton, and the award the "Jack Redmayne Cup."

I am greatly indebted to Mr. Alderman J. Livesey, who, together with Mr. Councillor B. Holden, and the Chairman and Vice-Chairman of the Health Committee, kindly acted as judges.

In assessing results the judges are guided by the following factors :

- (a) safety and cleanliness of the milk as indicated by bacteriological reports ;
- (b) nutritive value as shown by chemical analysis, (c) methods of production, nature of equipment for sterilisation, cooling, etc., and (d) the cleanliness of the dairies and those there employed.

Chemical Analysis.—One hundred and ninety one samples of milk, 137 of which were informal, were taken during the year and examined at the Public Health Laboratory, Liverpool. Eighteen samples, or 9.4% were reported not to conform with the standard prescribed by the Ministry of Agriculture. If an informal sample proves not to be genuine on analysis, a formal sample is purchased and submitted to the analyst.

TABLE 12.

AVERAGE COMPOSITION OF MILK SOLD IN BLACKBURN,
YEAR 1947.

MONTH	No. of Samples Taken.	% of Fat	% of other Solids.
January	21	3.83	8.56
February	21	3.47	8.64
March	21	3.69	8.74
April	21	3.76	8.73
May	11	3.51	8.97
June	9	3.25	8.97
July	10	3.36	9.24
August	11	3.63	9.07
September	17	3.52	8.88
October	13	4.32	9.17
November	12	3.85	8.74
December	24	3.48	8.28
Average	191	3.63	8.83

Examination of Milk for Dirt.—Samples of milk examined for dirt are filtered through wool discs, which are then dried and mounted. They are then available for records, comparisons, and for demonstration to producers.

Letters are sent to purveyors of contaminated milk, and wherever possible, visits are paid to the producing premises.

During the year 546 samples of milk were taken and examined for the presence of dirt with the results as shewn in the following table :—

TABLE 13.

	Number of Samples	Clean		Fairly Clean		Contaminated	
		Number	%	Number	%	Number	%
Milk produced inside the Borough...	296	154	52.0	84	28.4	58	19.6
Milk produced outside the Borough...	250	118	47.2	82	32.8	50	20.0
	546	272	49.8	166	30.4	108	19.7

Milk in Schools Scheme.—During the year 645,180 pints of milk were consumed in schools in Blackburn.

Meat Inspection.—In Cattle and Pigs, the only disease which takes heavy toll, amongst apparently healthy animals, is tuberculosis.

The number of susceptible animals (cattle, calves, pigs) affected with tuberculosis during 1947, was 1,876 or 14·10%.

Of 12,215 bovines slaughtered, 1,852 or 14·6%, were found to be affected with tuberculosis in some degree.

Of 451 pigs slaughtered, 24, or 5·3%, were affected.

The number of carcasses in which the disease was so advanced as to necessitate total condemnation was 188.

In 1947, 216 carcasses of cattle were totally condemned as being unfit for human food, and of these, 179 were affected with tuberculosis.

Infestation with fluke necessitates condemnation of a large proportion of livers. The number of livers and part livers rejected on this account during the year was 10,303.

Regular visits were made during the year to butchers and other meat shops (food preparing premises) wholesale and retail fish markets and to the meat market.

TABLE 14.

NUMBER OF ANIMALS SLAUGHTERED AT THE PUBLIC ABATTOIR.

Beasts	Sheep	Calves	Pigs	Total
7745	20096	4470	451	32762

NUMBER OF IMPORTED CARCASSES AND PORTIONS OF
CARCASSES ETC. BROUGHT TO THE ABATTOIR.

TABLE 15.

CARCASSES			PARTS OF CARCASSES					
Beef	Mutton and Lamb	Pork	Quart's of Beef	Bags of Pork Cuts	Sides of Veal	Bags of Mutton Cuts	Bags of Offal	Cases of Canned Corned Meat
...	69,133	...	20,711	363	89	101	3,184	14,666

CARCASSES EXAMINED AND REJECTED

TABLE 16.

	Cows	Heifers	Bulls	Bullocks	Calves	Sheep	Pigs	Total
Total No. of Carcasses Examined	3,118	2,222	137	2,268	4,470	20,096	451	32,762
No. Rejected for Tuberculosis	164	15	...	...	6	...	3	188
No. Rejected for Diseases, Etc., other than Tuberculosis ...	34	1	...	2	155	79	1	272

FISH, ETC., REJECTED.

Stones Fish	1041½	Bags of tripe	17
lbs. imported pork	67	lbs. of imported udders	166
lbs. imported mutton	5	lbs. bacon	119
lbs. imported beef	2213	Rabbits	180
Gangs of sheeps feet	1343	Sets of ox feet	200

CARCASSES, ETC., SENT FOR UTILISATION

117 tons. —cwts. 2 qrs. 5 lbs.

NUMBER OF VISITS TO INSPECT FOOD

Meat Shops	784	Meat Market	57
Fish Shops	241	Fish Market	87
Provision Shops	219	Fish Siding	160

OTHER FOODSTUFFS SEIZED OR SURRENDERED

Tins of Meat	2029	Bundles of Celery	100
Tins of Milk	3080	Chips of Cress	23½
Tins of Vegetables	15061	Bags of Onions	96
Tins of Fish	1050	lbs. of Raisins	70
Tins of Fruit	856	lbs. of Cheese	95
Tins of Soup	422	Casks of Carrots	1
Tins of Jam	1175	Pks. of shredded wheat	8
Tins of Tomatoes	154	Oat Flakes	1 Ton
Tins of Macaroni	2	lbs. of prunes	226
Tins of Bacon	8	Bottles of pickles	338
Tins of Puddings	205	lbs. of peas	664
Ducklings	24	lbs. vegetables	1260
Chickens	18	lbs. sugar	14
Chips of bilberries	198	lbs. sausages	54
Chips of cherries	57	lbs. Barley	87
Choc Ices	147	lbs. Sweets	16
Cases of biscuits	230	lbs. Butter	10
Crates of fruit	84	Bags of nuts	16

TABLE 17.**Food and Drugs Act, 1938, Section 13.**

INSPECTION OF CAFES, BAKEHOUSES, SAUSAGE AND COOKED
FOOD MANUFACTURERS, ETC.

Number of premises inspected	215
Number of premises found satisfactory	165
Number of premises where contraventions were found	50
Number of re-visits to unsatisfactory premises	115
Number of premises where contraventions were remedied	30

DETAILS OF CONTRAVENTIONS FOUND

	<i>Contraventions</i>	
	<i>Found</i>	<i>Remedied</i>
Sanitary conveniences in direct communication.....	6	2
Walls, ceilings, woodwork, not kept clean.....	38	25
Rooms not in structural repair.....	32	15
Insufficient Ventilation.....	11	7
Accumulations of refuse, and cleaning of floors.....	6	3
Insufficient cleanliness of utensils, apparatus, etc.....	3	—
Sinks not provided.....	12	2
Hot and cold water not provided.....	8	2

Food and Drugs Act, 1938. Section 14.

Applications for the registration of premises for the manufacture of
sausage, potted, pressed, pickled or preserved food.

Number of applications received	37
Number of applications granted	37
Number of applications refused	0

TABLE 18. THE FOOD & DRUGS (ADULTERATION) ACT, 1928

	Samples Taken.		Samples Genuine.		Samples Adulterated.	
	Formal	Informal	Formal	Informal	Formal	Informal
Milk	134	57	121	52	13	5
Flour Cake Mixture	—	3	—	2	—	1
Cocoa.....	—	3	—	3	—	—
Pudding Mixture	—	7	—	5	—	2
Zinc and Castor Oil Ointment ...	—	1	—	1	—	—
Coffee and Chicory essence	—	2	—	2	—	—
Black Beer	1	—	1	—	—	—
Barley	—	2	—	1	—	1
Dried Milk	—	1	—	1	—	—
Jam	—	1	—	1	—	—
Chocolate Cup	—	2	—	2	—	—
Oatmeal	—	3	—	3	—	—
Mixed Spice	—	2	—	2	—	—
Condensed Milk	—	5	—	5	—	—
Glycerine, Lemon and Honey ...	—	1	—	1	—	—
Meat Paste	1	1	1	1	—	—
Self-Raising Flour	—	3	—	3	—	—
Semolina	—	1	—	1	—	—
Ice-Cream	1	13	1	13	—	—
Vinegar	2	2	1	2	1	—
Tinned Irish Stew	—	1	—	1	—	—
Bi-Carbonate of Soda	—	2	—	2	—	—
Sulphur Tablets	1	1	1	1	—	—
Tincture of Iodine	—	1	—	1	—	—
Tinned Mixed Vegetables	—	1	—	—	—	1
Tinned Spaghetti.....	—	2	—	2	—	—
Tinned Salmon	—	3	—	3	—	—
Tinned Sardines	—	2	—	2	—	—
Tinned Pilchards	—	1	—	1	—	—
Tinned Macaroni	—	1	—	1	—	—
Epsom Salts	—	1	—	1	—	—
Tinned Peas	—	4	—	4	—	—
Tinned Herrings	—	1	—	1	—	—
Tinned Minced Beef Loaf	—	1	—	1	—	—
Tomato Soup	—	1	—	1	—	—
Marmalade	—	1	—	1	—	—
Lolli-Ice	—	1	—	1	—	—
Blood and Stomach Pills	—	1	—	1	—	—
Tinned Carrots.....	—	3	—	3	—	—
Potted Beef Paste	—	1	—	1	—	—
Influenza Mixture	1	—	1	—	—	—
Vitacup	—	1	—	1	—	—
Pepper	—	1	—	1	—	—
Sauce	1	3	1	3	—	—
Meat Extract	—	1	—	1	—	—
Total	142	146	128	136	14	10

TABLE 18—Continued

	Samples Taken		Samples Genuine		Samples Adulterated	
	Formal	Informal	Formal	Informal	Formal	Informal
Tomato Juice	1	—	1	—	—	—
Saccharine Tablets	—	1	—	1	—	—
Macaroni	—	1	—	1	—	—
Golden Raising Powder	—	2	—	2	—	—
Baking Powder	—	4	—	4	—	—
Malted Milk	—	1	—	1	—	—
Savormix	—	1	—	1	—	—
Coffee	—	6	—	6	—	—
Tinned Vegetables in Gravy	—	1	—	1	—	—
Tinned Soup.....	—	6	—	6	—	—
Fish Paste	—	1	—	1	—	—
Tinned Sild	—	2	—	2	—	—
Glycerine and Rosewater	—	1	—	1	—	—
Beetroot	—	1	—	1	—	—
Cod Liver Oil Emulsion	—	1	—	1	—	—
Barley Kernels.....	—	1	—	1	—	—
Custard Powder	1	—	—	—	1	—
Gelatine	1	1	1	—	—	1
Sausage Meal	—	1	—	1	—	—
Rennet	—	1	—	1	—	—
Camden Solution Tablets.....	—	1	—	—	—	1
Salmon Paste	1	1	1	1	—	—
Penny Royal	—	1	—	1	—	—
Olive Oil	1	—	1	—	—	—
Piccalilli	—	1	—	1	—	—
Sausage	1	—	—	—	1	—
Tinned Kipper Snacks	—	1	—	1	—	—
Tinned Spinach	—	1	—	1	—	—
Mustard	—	3	—	3	—	—
Rum	3	—	3	—	—	—
Korpus Doon	1	—	—	—	1	—
Strength Tablets	1	—	1	—	—	—
Whisky	1	—	1	—	—	—
Beef Sausage	10	—	4	—	6	—
Butter Flavouring	—	1	—	1	—	—
Continental Mustard	—	1	—	1	—	—
Cinnamon (ground)	—	1	—	1	—	—
Ground Nutmeg	—	2	—	2	—	—
Flake Barley	—	1	—	1	—	—
Gravy Browning	2	1	2	1	—	—
Gravy Improver	—	1	—	1	—	—
Lemon Cordial	1	—	—	—	1	—
Lemonade Crystals	1	—	1	—	—	—
Lime Cordial	1	—	—	—	1	—
Lime Flavour Compound	—	1	—	1	—	—
Total	27	51	16	49	11	2

TABLE 18—Continued

	Samples Taken		Samples Genuine		Samples Adulterated	
	Formal	Informal	Formal	Informal	Formal	Informal
Luncheon Sausage	—	1	—	1	—	—
Meat Cubes	—	1	—	1	—	—
Mushroom Ketchup	1	—	1	—	—	—
Sage and Onion Stuffing	—	1	—	1	—	—
Soup Powder	—	1	—	1	—	—
Soya Flour	—	2	—	2	—	—
Cough Mixture	—	1	—	1	—	—
Tinned Salmon and Anchovy ...	—	1	—	1	—	—
Cream of Tartar	—	1	—	1	—	—
Scotch Herrings in Tomato	—	1	—	1	—	—
Vite Gravy	—	1	—	1	—	—
Alexmint	—	1	—	1	—	—
Gin.....	1	—	1	—	—	—
Almond Flavour	—	1	—	1	—	—
Blackcurrant Puree.....	—	1	—	1	—	—
Black Pudding	1	—	1	—	—	—
British White Wine	1	—	1	—	—	—
Cocoanut Flavour	—	1	—	1	—	—
Danish Salami	1	—	1	—	—	—
Dried Onions	—	1	—	1	—	—
Fruit Sauce	—	1	—	1	—	—
Ginger	—	1	—	1	—	—
Grape Fruit Squash	1	—	1	—	—	—
Indian Brandee	—	1	—	1	—	—
Lemonade Powder	—	1	—	1	—	—
Maple meat	—	1	—	1	—	—
No. 10 Cocktail	1	4	—	—	1	4
Pineapple Conserve	1	—	1	—	—	—
Potted cod liver & cod roe paste...	1	—	1	—	—	—
Red Cabbage	—	1	—	1	—	—
Total	9	26	8	22	1	4
Brought Forward .....(i)	142	146	128	136	14	10
(ii)	27	51	16	49	11	2
Grand Total	178	223	152	207	26	16

TABLE 19

THE FOOD AND DRUGS (ADULTERATION ACT,) 1928.—ACTION TAKEN IN REGARD TO ADULTERATED SAMPLES.

Article Purchased	Number of Sample	Formal	Informal	Amount of Adulteration	Action Taken
Milk ...	443	—	1	Deprived of 8% of milk fat.	Accommodation Milk. Unable to trace Supplier. Further sample taken and found genuine.
Milk ...	453	—	1	Contained 15% added water.	Formal sample taken and found genuine.
Milk ...	12	—	1	Deprived of 20% of milk fat.	Third sample broken through severe weather. Further-sample taken and found genuine.
Milk ...	15	—	1	Deprived of 25% of milk fat.	Formal sample taken and found genuine.
Milk ...	57	—	1	Deprived of 6% of milk fat.	Formal sample taken and found genuine.
Barley ...	30	—	1	Infested with dead and living acari and other insects. Unfit for human consumption.	Consignment withdrawn. Letter sent.
Mixed Vegetables	32	—	1	Sample deficient in carrots to the extent of 7% and beans to the extent of 7%.	Letter Sent.
Milk ...	153	1	—	Slightly deficient in milk fat.	Letter of warning sent.
Cake Flour	69	—	1	30% deficient in available carbon dioxide.	Letter of warning sent. Consignment withdrawn.
Custard	134	1	—	Contained dead acari .8.	Letter of warning sent. Custard powder destroyed.
Powder...	143	1	—	.93 deficiency of magnesium sulphide compared with statement on label.	Letter of warning sent.
Korpusdoon	209	1	—	Deprived of 8% of its original milk fat.	Letter of warning sent.
Milk ...	230	1	—	Contained 6% of added water.	Vendor fined £3.
Milk ...	241	1	—	Deprived of 11% of its original milk fat.	Vendor fined £2.
Beef	202	1	—	36% deficient in meat content.	Fine of £3 3s. 0d. and £1 1s. 0d. costs
Sausage...	176	1	—	Devoid of meat.	Fine of £5.

Beef	200	1	—	24% deficient in meat content.	Fine of £3 3s. 0d. and £1 1s. 0d. costs.
Beef Sausage...	203	1	—	34% deficient in meat content.	Fine of £3 3s. 0d. and £1 1s. 0d. costs.
Beef Sausage... Campden solution tablets...	204	1	—	50% deficient in meat content.	Fine of £3 3s. 0d. and £1 1s. 0d. costs.
Lemon Cordial...	232	1	—	16.5% of sulphur dioxide in excess of statement on label.	No stocks available for formal sample. Letter of warning sent.
Lime cordial	172	1	—	30% deficiency of sugar and 32% deficiency of citric acid.	Referred to Ministry of Food who decided that proceedings should not be instituted.
Non-brewed Vinegar...	171	1	—	Acid in sample due to fermentation.	Letter of warning sent.
Yorkshire pudding mixture...	212	—	1	Acidity as acetic acid 3.5%.	Fine of £2.
Milk ...	300	1	—	Available carbon dioxide .3%.	Repeat sample showed a satisfactory carbon dioxide content, but heavy infestation with acari. Percentage examination of stock of pudding mixture examined and found to be infested. All stocks surrendered. Appeal to cow sample and investigation at farm revealed unusual circumstances which may have been the cause of adulteration. Letter of warning sent. Samples 310, 311, 313, were formal repeats on samples numbered 308 and 309. Proceedings were instituted in connection with sample 313, but were withdrawn, owing to legal error in issue of sampling authority by County Council.
Milk ...	308	—	1	10% added water.	
Milk ...	309	—	1	4% added water, 28% fat deficiency.	
Milk ...	310	1	—	16% deficient in fat.	
Milk ...	311	1	—	Solids not fat 8.29%. Reported abnormal.	
Milk ...	313	1	—	Solids not fat 8.03%. Reported abnormal. 18% deficiency of fat.	

TABLE 19—Continued

Milk ...	339	1	—	10% of added water.	Samples 341, 342, 343 were appeal to cow samples following unsatisfactory report on 339 and 340.
Milk ...	340	1	—	10% of added water.	Appeal to cow samples reported abnormal milks.
Milk ...	341	1	—	Reported by Public Analyst as "Abnormal Milks."	Letter of warning sent.
Milk ...	342	1	—	—	—
Milk ...	343	1	—	—	—
Beef	—	—	—	—	—
Sausage...	256	1	—	22% deficient in meat.	Fined £5 and £8 8s. 0d. costs.
Yorkshire	—	—	—	—	—
Pudding	—	—	—	—	—
mixture...	256	—	1	Infested with acari.	Stocks examined and found infested. Surrender of stock accepted.
Gelatine ...	316	—	1	2.35% excess of mineral matter.	Letter of warning sent.
No. 10	—	—	—	—	—
Cocktail 328	—	1	—	Article not of nature and substance demanded.	Owing to Ministry of Food and adjoining authorities taking legal action against the producer, no legal proceedings were instituted. Letter of warning sent.
Cocktail 334	—	—	1	Infringements of Labelling of Food order, 1946.	—
Cocktail 335	—	—	1	—	—
Cocktail 336	—	—	1	—	—
Cocktail 337	—	—	1	—	—

TABLE 20.

THE PUBLIC HEALTH (PRESERVATIVE &C. IN FOOD) REGULATIONS 1925 TO 1940

DESCRIPTION OF SAMPLE.	No. of Samples Examined	Number of Samples Free	No. Containing Preservative	Where examination for preservative has been made and none found the fact is indicated by a x. All results are expressed in parts per million.							
				Sulphur Dioxide	Benzoic Acid	Borates	Salicylic Acid	Hydrogen Peroxide	Formaldehyde	Fluorides	Nitrites
Milk	191	191	—	—	—	x	—	—	x	—	—
Barley	2	2	—	x	—	—	—	—	—	—	—
Chocolate Cup	1	1	—	—	—	x	—	—	—	—	—
Coffee and Chicory Essence	2	2	—	x	x	x	x	—	—	—	—
Condensed Milk	5	5	—	—	—	x	—	—	—	—	—
Meat Paste	3	3	—	x	—	x	—	—	—	—	x
Sauce	5	4	1	40	x	x	x	—	—	—	—
Semolina	1	1	—	x	—	—	—	—	—	—	—
Vita-cup	1	1	—	x	—	x	—	—	—	—	—
Jam	1	1	—	x	x	x	x	—	—	—	—
Pepper	1	1	—	x	—	—	—	—	—	—	—
Custard Powder	1	1	—	x	—	—	—	—	—	—	—
Ice-Cream	14	14	—	x	—	—	—	—	x	—	—
Lolly-Ice	1	1	—	x	—	x	—	—	x	—	—
Picalilli	1	1	—	x	x	x	x	—	—	—	—
Potted Fish Paste	4	4	—	x	x	x	x	—	—	—	—
Potted Meat	1	1	—	x	—	x	—	—	—	—	x
Sausage	11	10	1	30	—	x	—	—	—	—	x
Flake Barley	1	1	—	x	—	x	—	—	—	—	x
Gravy Browning	2	2	—	x	—	—	—	—	—	—	—
Gravy Improver	1	1	—	x	—	—	—	—	—	—	—
Junket Rennet	1	1	—	x	—	x	—	—	—	—	—

Fertilisers and Feeding Stuffs Act, 1926. Twelve samples of feeding stuffs and fertilisers were examined by the Analyst during the year. Of these six conformed with the statutory statement and six failed to do so. The vendors of the samples were informed of the difference between the actual composition and the composition as defined in the statutory statement, and the deficiency or excess was pointed out.

The appended table gives particulars of the work done under the Act.

TABLE 21

Article	No. of Samples	Formal	Informal	According to Statutory Statement	Not According to Statutory Statement	Action Taken
Sangral Fertiliser	1	—	1	1	—	...
Liver Meal	1	—	1	—	1	Letter of warning sent.
Granular vegebite	1	—	1	—	1	Letter of warning sent.
Fish Meal	1	—	1	—	1	Letter of warning sent.
Weating	2	—	2	1	1	Letter of warning sent.
Dairy Meal	1	—	1	1	—	...
Laying Meal	1	—	1	—	1	Letter of warning sent.
Barley Meal	2	—	2	1	1	Letter of warning sent.
Muriate of Potash	1	—	1	1	—	...
Tomato Manure	1	1	1	1	—	...

Merchandise Marks Act, 1926. Every endeavour has been made to give publicity to the provisions of the above Act.

Six hundred and thirty visits were made to premises.

PART IV

Prevalence of
and
Control over,
Infectious Disease.

TABLE 22

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1947.

NOTIFIABLE DISEASE.		Number of Notifications received	Number of Cases in which diagnosis was subsequently corrected	Corrected number of noti- fications	Number admitted to Hospital	Number Died
Small-pox	...	—	—	—	—	—
Cholera	...	—	—	—	—	—
Diphtheria (Including Membranous Croup)	...	19	14	5	19	—
Erysipelas	...	7	—	7	1	1
Scarlet Fever	...	159	4	155	69	1
Typhus Fever	...	—	—	—	—	—
Enteric Fever	...	1	—	1	1	—
Puerperal Pyrexia	...	64	2	62	2	—
Cerebro-spinal Meningitis	...	6	4	2	6	—
Ophthalmia Neonatorum	...	23	—	23	6	—
Pulmonary Tuberculosis	...	97	—	97	143**†	50*
Other Forms of Tuberculosis	...	25	—	25	24**†	10*
Polio-myelitis...	...	2	—	2	2	—
Encephalitis Lethargica	...	—	—	—	—	—
Dysentery	...	4	—	4	—	—
Malaria	...	—	—	—	—	—
Pneumonia (Acute Primary and Acute Influenzal)	...	82	—	82	—	3
Diarrhoea	...	6	—	6	6	—
Whooping Cough	...	152	—	152	4	2
Measles	...	584	—	584	—	4
Pemphigus Neonatorum	...	4	—	4	2	—
		1235	24	1211	285	71

*These figures include a number of cases notified during previous years. †These figures include Blackburn cases admitted to the various Hospitals under the control of the Lancashire County Council.

TABLE 23.

SHEWING NUMBER OF CASES OF INFECTIOUS DISEASES
NOTIFIED FROM 1938 TO 1947.

DISEASE.	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947
Smallpox ...	...	...	...	...	...	...	...	...	...	...
Diphtheria (including Mem- branous Croup) ...	172	95	65	66	82	69	29	32	28	19
Erysipelas ...	17	34	24	26	18	21	10	18	10	7
Scarlet Fever ...	235	192	92	98	254	317	330	399	120	159
Enteric Fever ...	2	...	10	7	...	2	2	...	1	1
Puerperal Pyrexia ...	24	23	12	23	19	23	29	22	33	64
Typhus Fever ...	...	...	...	...	...	...	...	...	...	...
Cerebro-Spinal Meningitis ...	6	7	25	35	20	13	4	10	5	6
Poliomyelitis ...	2	1	8	...	...	...	1	2	1	2
Pulmonary Tuberculosis ...	100	88	91	80	109	99	83	84	88	97
Other forms of Tuberculosis ...	38	31	24	26	32	25	9	26	22	25
Ophthalmia Neonatorum ...	5	14	6	14	13	15	15	23	28	23
*Measles ...	...	107	1367	992	804	144	1220	306	596	584
Encephalitis Lethargica ...	5	3	...	2	1	1	...	...	...	...
Dysentery ...	...	15	2	41	2	64	78	59	16	4
Malaria ...	1	...	...	1	...	1	...	...	1	...
Pneumonia ...	166	215	186	137	117	147	49	76	72	82
†Diarrhoea ...	2	3	...	5	1	...	...	2	...	6
*Whooping Cough ...	...	142	412	249	147	218	132	93	125	152
TOTALS ...	775	970	2324	1802	1619	1159	1991	1152	1146	1231

* Notifiable from 1939 † Notifiable from July 1st to October 31st.

TABLE 24.
VACCINATION RETURNS, 1947

Month	Births	Successfully Vaccinated	Exempted	Died Unvaccin- ated	Vaccination Postponed	Removed not traced	Removed traced	Unaccount- ed for	Insepar- able
January ..	290	103	130	9	2	2	—	43	1
February ..	195	72	89	10	2	2	—	20	—
March ..	247	72	130	10	3	1	—	29	2
April ..	230	83	108	7	1	2	—	27	2
May ..	221	61	116	6	3	1	—	32	2
June ..	221	60	110	5	—	1	—	41	4
July ..	196	69	91	7	2	—	—	26	1
August ..	185	30	91	5	4	—	—	55	—
September ..	215	12	105	11	—	—	—	87	—
October ..	195	7	62	2	—	—	—	124	—
November ..	176	—	42	—	—	—	—	134	—
December ..	198	—	23	4	—	—	—	171	—
TOTALS ..	2569	569	1097	76	17	9	—	789	12

From the above table it will be noted that of 2569 children born during the year only 569, or 22·1%, were successfully vaccinated, and exemptions were successfully claimed in respect of 1097 children, or 42·8% of those born.

TABLE 25

DIPHTHERIA IMMUNISATION.

Age.	Number completed in 1947.	Number completed prior to 1947.	Number immunised to end of 1947.	
		Children under 5.		
1	959	—	959	
2	157	866	1023	Population
3	48	1038	1086	Ages 1-5. 7915
4	150	861	1011	
	1314	2765	4079	= 51·53% of above population.
		Children 5 to 15.		
5	123	1198	1221	
6	155	1021	1176	
7	117	1121	1238	Population
8	106	1129	1235	5-15. 12841.
9	103	1224	1327	
10	89	1179	1268	
11	72	1227	1299	
12	76	1272	1348	
13	58	1206	1264	
14	35	1330	1365	
	934	11807	12741	= 99·23% of above population.
Total ... Ages 1-15	2248	14572	16820	

In addition to the children included in this table, 2209 children who had been previously immunised received re-inforcing injections.

The above percentages have been calculated on the basis of the estimated population figures supplied by the Registrar General and should be treated with reserve. No Census has been taken since 1931 and it is possible that the percentage for the under 5 age group may be a little on the low side and that for the older group unduly optimistic. The error for the former group may be due to some slight over estimate of population. That for the latter group

may be due to the reverse, plus the fact that a proportion of the children treated may have been immunised earlier in life without the parents so disclosing on the consent forms. Such children would then be entered as "Primary Immunisations" and not as "Re-inforcements," thereby throwing the figures out of gear.

TABLE 23

DIPHTHERIA IMMUNISATION.

TREATMENTS COMPLETED EACH YEAR FROM 1937 TO 1947.

Age in years on 31st December of corres- ponding year.	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947
1	9	36	3	4	284	543	762	667	930	866	959
2	4	20	18	6	205	306	187	145	136	108	157
3	22	56	31	12	296	330	174	57	76	80	48
4	25	99	34	8	418	382	212	101	117	113	150
5	53	160	44	2	599	256	215	106	160	106	123
6	24	140	47	2	583	168	187	100	130	86	155
7	23	161	44	3	503	127	115	78	125	116	117
8	18	117	42	2	500	97	128	71	120	85	106
9	15	109	20	3	550	87	118	79	113	77	103
10	12	84	27	1	484	73	99	71	127	59	89
11	17	98	15	1	462	47	58	31	113	57	72
12	10	53	1	2	536	26	33	24	159	49	76
13	13	66	1	2	399	20	36	33	148	35	58
14	5	5	...	...	96	...	11	5	64	8	31
15+	...	...	...	...	116	...	...	3	...	...	4
TOTAL ...	250	1204	327	48	6031	2462	2335	1571	2518	1845	2248

CORPORATION HOSPITAL

The total accommodation of 124 beds is the same as in previous years : 110 of these beds are in 4 large wards and 14 in a ward composed of 7 isolation cubicles. One ward of 30 beds has been used for the treatment of Pulmonary Tuberculosis. The ward of isolation cubicles has been used throughout the year for infectious diseases. The other three wards have been closed, except when one was opened for a short time to accommodate the cases of neonatal diarrhoea which occurred at the beginning of the year. The shortage of nursing staff has been a constant difficulty, but for which a second ward for infectious diseases would have been kept open and in use.

Admissions. Patients admitted during 1947 (excluding Tuberculosis) numbered 197, as compared with a total of 189 in 1946. The daily average number of beds occupied was 9.02. The average length of stay of all patients was 16.7 days. Twelve patients were admitted from outside Blackburn, while Blackburn patients were admitted to other Isolation Hospitals ; 48 of the admissions were patients transferred from other hospitals.

Deaths. Seven deaths occurred during the year ; 4 due to Gastro-enteritis, 1 to Measles Pneumonia, 1 admitted as Poliomyelitis which proved to be advanced Addison's disease, and 1 admitted as cerebro-spinal fever, who had Tuberculous Meningitis. There were no deaths from Scarlet Fever or Diphtheria.

TABLE 27
Patients treated in Corporation Hospital.

Disease as notified	In Hospital on Jan. 1st, 1947	Admitted during 1947		Recovered	Transferred to other hospital	Died	In Hospital on 31st Dec., 1947
		With final diagnosis as notified	With final diagnosis not as notified				
Scarlet Fever.....	2	56	2	56	1	—	3
Diphtheria	3	5	14	20	1	—	1
Gastro-Enteritis.....	—	31	2	24	—	4	5
Neo-natal Diarrhoea ...	—	11	—	11	—	—	—
Measles	2	17	—	18	—	1	—
Anterior Poliomyelitis ...	—	3	6	6	2	1*	—
Cerebro-spinal Fever.....	—	4	6	8	1	1†	—
Ophthalmia Neonatorum	1	6	—	7	—	—	—
Pemphigus Neonatorum	—	2	—	2	—	—	—

* Cause of death : Addison's Disease.

† Cause of death : Tuberculous Meningitis.

Scarlet Fever. Fifty-eight cases were admitted as Scarlet Fever, 2 of which proved to be other diseases, namely Tonsillitis and Leukaemia. The latter case was transferred to the Royal Infirmary for further investigation. Where isolation was possible at home and the attack was mild, patients with Scarlet Fever were not admitted to hospital. Due to shortage of staffed beds, a number of cases of Scarlet Fever were admitted to other Isolation Hospitals. No deaths occurred from Scarlet Fever during the year. The average length of stay in hospital was 21.7 days. Nine cases developed complications :

1 Myocarditis, 1 Otitis media, 1 Otitis externa, 3 Cervical adenitis and 3 localised septic lesions.

Diphtheria. Nineteen cases were admitted as Diphtheria, fourteen of which were found to be suffering from other diseases, namely :

Tonsillitis 10 (one of these cases was also a carrier of non-virulent *C. Diphtheriae*). Bilateral Quinsy 1. Catarrhal Laryngitis 1. Whooping Cough 1. Stephens-Johnson Syndrome 1.

The five cases of actual Diphtheria occurred between August and October. One of the cases was that of a man not normally resident in Blackburn, who developed Diphtheria while on a short visit to the town. Four of the five cases had not been immunised against Diphtheria and they had fairly severe attacks. One admitted on the 5th day of disease had late paralysis. 2 admitted on the 3rd and 8th days of disease respectively, had Cardiac Impairment. One admitted on the 4th day of disease had no complications. The fifth case, an adult immunised in childhood had a very mild attack. There were no deaths.

The average length of stay in hospital of all cases admitted as Diphtheria was 31.9 days, and of proved cases of Diphtheria 68.2 days. The latter high figure was in part due to 2 persistent convalescent carriers.

OTHER DISEASES.

Poliomyelitis. Blackburn was fortunate during the epidemic of Poliomyelitis in having very few cases. In all, 9 patients were admitted as Anterior Poliomyelitis, 3 of which were found to be suffering from this disease. Of these 3, one of which was admitted from outside Blackburn, only 2 developed paralysis ; of the other six cases, one had advanced Addison's Disease and died, one had Tuberculous Meningitis and was transferred to another hospital, one had Encephalitis, and 3 had upper respiratory infections.

Neo-natal Diarrhoea. 10 infants (the " backwash " of the 1946 Springfield outbreak) in January and 1 in September all under 9 days old, were admitted with their mothers ; all of them recovered.

Gastro-Enteritis. 34 cases were admitted, 2 of whom were found to be suffering from Bronchitis. Twelve of these 34 cases were admitted during an

outbreak in July and August, of whom 2 died. Two other deaths from the disease occurred earlier in the year.

Measles. Seventeen cases were admitted during the year, the majority of which were complicated by Broncho-pneumonia and one of whom died.

Cerebro-Spinal Fever. 10 cases were admitted as Cerebro-Spinal Fever, 4 were found to have the disease, one of these 4 cases was later transferred to another hospital with a perforated Gastric Ulcer. Of the other 6, one had Tuberculous Meningitis and died, 2 had Bronchitis, 1 Sinusitis, 1 Enteritis and in one case nothing abnormal was discovered.

Ophthalmia Neonatorum. Six were admitted and all recovered without permanent damage to the eye.

Pemphigus Neonatorum. Two cases were admitted and made rapid recoveries on Penicillin given orally.

Puerperal Pyrexia. Two cases were admitted and recovered.

Whooping Cough. Five cases were admitted of which one was complicated by Broncho-pneumonia. One case also had Epilepsy and another Asthma.

Chicken Pox. Two cases were admitted, one of whom also had Osteomyelitis. Both recovered.

Enteric Fevers. Two cases were admitted one of which proved to be Paratyphoid - B and the other Benign Lymphatic Meningitis.

Erysipelas. One case was admitted and recovered.

Rubella. One case admitted as Rubella, proved to have Urticaria and Eczema.

Mothers and Babies. Sixteen healthy mothers were admitted with their infants, and 3 healthy babies with their mothers in order that breast feeding could be continued.

Staff Sickness. All new staff were Schick and Dick tested, followed, where necessary, by immunisation against Diphtheria and Scarlet Fever. They were also immunised against the Enteric Fevers and vaccinated, if not recently protected in these ways.

All staff were vaccinated or re-vaccinated in April, and a number of new staff in June.

Routine Chest X-rays of all resident staff, and all non-resident nursing staff and other out-door staff who desired it were taken during the year.

No. of staff admitted to the wards	...	...	...	1
No. of staff off duty for sickness	...	...	...	6
No. of visits by staff to Doctor for sickness	...	...	...	68

TABLE 28

ADMISSIONS FROM OTHER HOSPITALS OR INSTITUTIONS

Disease	Admitted from				
	Blackburn Royal Infirmary	Queen's Park Hospital	Springfield Maternity Home	Bull Hill Hospital	Bolton Fever Hospital
Scarlet Fever	1	2	—	1	1
Measles	1	—	—	1	—
Whooping Cough	3	—	—	—	—
Poliomyelitis	1	—	—	—	—
Gastro-Enteritis	1 *	—	—	—	—
Cerebro-Spinal Fever	3	—	—	—	—
Rubella	1	—	—	—	—
Ophthalmia Neonatorum	—	—	2	—	—
Pemphigus Neonatorum	—	—	1	—	—
Puerperal Pyrexia	—	—	2	—	—
Neo-natal Diarrhoea	—	—	11	—	—
Mothers with babies	—	—	14	—	—
Babies with mothers	—	—	2	—	—
Totals	11	2	32	2	1

Out of Borough Cases. Admissions from outside Blackburn were as follows :

Measels	2
Scarlet Fever	2
Poliomyelitis	1
Cerebro-Spinal Fever	2
Whooping Cough	1
Chicken Pox	1
Rubella	1
Ophthalmia Neonatorum	1
Mother admitted with baby	1

Tuberculosis. Male patients only have been admitted, and the nursing staff has been supplemented by male nursing orderlies. Women patients were treated at other Sanatoria.

Although the majority of cases were late or advanced a small number of early cases were also dealt with. Due to large number of advanced cases the death rate was high. This should not be misinterpreted as indicating that the ward is not fulfilling a useful purpose as it is of the utmost importance that the highly infectious advanced case should be isolated from the family contacts,

	Blackburn Cases	Cases from the County Area	Total
No. of patients resident on 1st Jan., 1947...	8	19	27
No. admitted during 1947	33	46	79
No. of patients remaining on 31st Dec. 1947	10	18	28
No. of deaths	6	11	17
No. of patients discharged during 1947 ...	25	36	61

TABLE 29

SANATORIUM WARD

DETAILS OF SPECIAL TREATMENTS					No. of patients	No. operations, injections, etc.
Artificial Pneumothorax —						
Inductions (attempted 8, successful 1)	...	...	...	...	9	9
Artificial pneumothorax Refills	...	...	...	...	13	134
Pneumoperitoneum—Inductions	...	...	...	...	9	9
Refills	...	...	...	...	9	164
Thoracoscopy examinations	...	...	...	...	1	1
Aspirations —Chest	...	...	...	...	6	6
Abscesses	...	...	...	...	1	1
Gas replacements	...	...	...	...	2	2
Rib resection	...	...	...	...	1	1
Mantoux tests	...	...	...	...	6	6
Blood sedimentation tests (Wintrom method)	...	...	...	...	20	20
X-ray work —Screen examinations	...	...	...	...	38	231
Skiagrams	...	...	...	...	99	271
Sputum examinations—			Positive	...	103	264
			Negative	...		
Cultures —Sputum	...	...	...	...	15	15
Other specimens	...	...	...	...	7	7

PART V.

Tuberculosis Scheme

TUBERCULOSIS SCHEME.

During the year 1947, the administration of the tuberculosis scheme has proceeded smoothly.

Regular sessions were held at the Blackburn Dispensary for the diagnosis and treatment of patients. Monthly reports showing the work done through the dispensary were forwarded to me during the year.

The number of patients admitted to sanatoria and hospitals was 200, 160 were discharged and 20 died in the institutions ; at the end of the year, 80 patients were still undergoing treatment. In addition, 18 service cases were admitted, 20 were discharged, and 6 were still in hospital at the end of 1947.

Patients suffering from non-tuberculous chest conditions were treated at the Chest Centre, Broadgreen Hospital, Liverpool ; 13 were admitted, 11 were discharged and one died.

The number of tuberculous pensioners on the dispensary register at the end of the year was 80 as against 60 for the previous year.

The number of cases on the *dispensary register* on the 31st December was :—

				Pulmonary tuberculosis	Non-pulmonary tuberculosis	Total
Adults—Males...	...	...	...	215	23	238
Females	...	...	...	123	16	139
Children—Males	...	...	...	9	28	37
Females	...	...	...	2	4	6
				—	—	—
				349	71	420
				—	—	—

There were on the Notification Register the following cases :

				Pulmonary tuberculosis	Non-pulmonary tuberculosis	Total
Adults— Males	...	...	...	229	30	259
Females	...	...	...	145	26	171
Children—Males	...	...	...	6	21	27
Females	...	...	...	4	19	23
				—	—	—
				384	96	480
				—	—	—

TABLE 30.

SUMMARY OF NOTIFICATIONS DURING THE YEAR

FORMAL NOTIFICATIONS.													
AGE PERIODS... ..	NUMBER OF PRIMARY NOTIFICATIONS OF NEW CASES OF TUBERCULOSIS.											TOTAL NOTIFICATIONS 1922	
	0—	1—	5—	10—	15—	20—	25—	35—	45—	55—	65—		TOTAL ALL AGES
Pulmonary Males	—	—	1	—	2	6	16	6	9	9	7	56	
" Females... ..	—	—	2	—	2	9	12	10	1	3	2	41	
Non-Pulmonary Males	—	—	1	4	—	1	3	1	1	—	—	11	
" Females... ..	—	1	3	1	2	1	2	2	2	—	—	14	
Col. (1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	

TABLE 31

New cases of Tuberculosis coming to the knowledge of the Medical Officer of Health during the year, otherwise than by formal notification.

[illegible]

The source from which information as to the above-mentioned cases was obtained.

Sources of Information.				No. of Cases	
				Pulmonary	Non-Pulmonary
Death Returns	From Local Registrars			11	4
	Transferable deaths from Registrar-General			10	1
Posthumous Notifications				1	-
"Transfers" from other areas (other than transferable deaths)				5	3
Total ...				27	8

TABLE 32

Blackburn patients admitted to and discharged from sanatoria and hospitals during the year 1947.

Institution	In Institution on 1-1-47	Admitted	Discharged	Died in Institution	In Institution on 31-12-47
Pulmonary Tuberculosis					
Aitken Sanatorium ...	-	2	-	1	1
Elswick Sanatorium ...	3	6	5	-	4
High Carley Sanatorium	6	4	7	-	3
Westmorland Sanatorium	-	6	1	1	4
Brinscall Pulmonary Hos.	-	5	3	-	2
Heath Charnock Pul.Hos.	7	10	12	3	2
Rufford Pulmonary Hos.	1	9	4	2	4
Withnell Pulmonary Hos.	4	14	7	-	11
Wrightington Hospital ...	7	8	8	-	7
Fall Birch Hospital ...	1	14	9	3	3
Halifax Sanatorium ...	3	9	9	-	3
Lancaster Pulmonary H.	3	2	3	-	2
Park Lee Hospital ...	6	29	20	6	9
Peel Hall Pulmonary Hos	4	4	5	-	3
Broadgreen Hospital ...	-	7	6	-	1
Chadderton Pulm'y Hos.	-	5	2	1	2
Pemberton Pulm'y Hos.	-	2	2	-	-
Wolstenholme Pulm'y H.	-	1	-	1	-
Blackburn Royal Inf'm'y	-	6	6	-	-
Pulmonary Total ...	45	143	109	18	61

TABLE 32—Continued.

	In Institution on 1-1-47	Admitted	Discharged	Died in Institution	In Institution on 31-12-47
Observation Cases— Pulmonary					
Elswick Sanatorium ...	-	2	2	-	-
Withnell Pulmonary Hos.	-	3	3	-	-
Fall Birch Hospital ...	-	1	2	-	-
High Carley Sanatorium	1	3	3	-	-
Park Lee Hospital ...	1	6	6	-	1
Westmorland Sanatorium	-	1	1	-	-
Aitken Sanatorium ...	-	1	1	-	-
Brinseall Pulm'y Hosp'l	-	1	1	-	-
Halifax Sanatorium ...	-	4	2	-	2
Heath Ch'n'k Pulm'y H.	-	2	1	-	1
Lancaster Pulm'y Hosp'l	-	3	3	-	-
Rufford-Pulm'y. Hospital	-	1	-	-	1
Observation Total ...	2	28	25	-	5
Observation Cases— Non-Pulmonary					
Wrightington Hospital ...	-	5	3	-	2
Non-Pulmonary Tuberculosis					
Fall Birch Hospital ...	-	1	1	-	-
Wrightington Hospital ...	13	17	16	2	12
Blackburn Royal Inf. ...	-	5	5	-	-
Hammersmith Hospital	-	1	1	-	-
Non-Pulmonary Total	13	24	23	2	12
Military Cases					
Broadgreen Hospital ...	-	3	3	-	-
Peel Hall Pulmonary H.	2	1	3	-	-
Park Lee Hospital ...	4	5	6	2	1
Elswick Sanatorium ...	1	2	2	-	1
Wrightington Hospital ...	-	5	2	-	3
Heath Charnock Pul. H.	2	1	3	-	-
Withnell Pulmonary Hos.	1	1	1	-	1
Total Military Cases ...	10	18	20	2	6
Non-Tuberculous Conditions					
Broadgreen Hos, Liverp'l	-	13	11	1	1

TABLE 33.

DETAILS OF WORK CARRIED OUT AT COUNTY SANATORIA AND HOSPITALS
IN RESPECT OF BLACKBURN PATIENTS DURING THE YEAR 1947.

Artificial pneumothorax—Inductions	...	...	...	...	...	...	...	13
Refills	...	...	...	...	...	...	...	235
Pneumoperitoneum—Inductions	...	...	...	...	...	...	...	8
Refills	...	...	...	...	...	...	...	147
Thoracoscopy examinations	...	...	...	...	...	...	...	2
Thoracoscopy and Division of Adhesions	...	...	...	...	...	...	...	1
Thoracoplasty operations	...	...	...	...	...	...	...	14
Gold salt injections...	...	...	...	...	...	...	...	19
Aspirations—Chest	...	...	...	...	...	...	...	30
Abscesses	...	...	...	...	...	...	...	2
Phrenic Crush	...	...	...	...	...	...	...	4
Penicillin	...	...	...	...	...	...	...	1,841
Bronchoscopy Examination	...	...	...	...	...	...	...	2
Pyelectan	...	...	...	...	...	...	...	2
Mantoux tests	...	...	...	...	...	...	...	6
Blood sedimentation tests	...	...	...	...	...	...	...	119
X-ray work—Screen examinations	...	...	...	...	...	...	...	642
Skiagrams	...	...	...	...	...	...	...	491
Sputum examinations—Positive	...	...	...	...	...	...	...	176
Negative...	...	...	...	...	...	...	...	305
Cultures—Sputum	...	...	...	...	...	...	...	11
Other Specimens	...	...	...	...	...	...	...	12
Radiant Heat	...	...	...	...	...	...	...	7
Collinson's Inhaler	...	...	...	...	...	...	...	4
Rib resection	...	...	...	...	...	...	...	1
Lipiodol Injections	...	...	...	...	...	...	...	1

TABLE 34

RETURNS SHOWING THE WORK OF THE BLACKBURN DISPENSARY
DURING THE YEAR 1947

DIAGNOSIS	PULMONARY				NON-PULMONARY				TOTAL				GRAND TOTAL
	Ad'lts		Chil'n		Ad'lts		Chil'n		Ad'lts		Chil'n		
	M	F	M	F	M	F	M	F	M	F	M	F	
A.—(1) Number of definite cases of Tuberculosis on the Dispensary Register on the 1st January, 1947 ...	187	113	8	2	20	13	29	3	207	126	37	5	375
(2) Transfers from other Authorities during the year	4	2	-	-	-	1	1	-	4	3	1	-	8
(3) Lost sight of cases returned during the year ...	-	-	-	-	-	-	-	-	1	-	-	-	-
B.—Number of New Cases diagnosed as tuberculosis during the year :—													
(1) Class T.B. minus ...	18	19	1	1	-	-	-	-	18	19	1	1	39
(2) Class T.B. plus ...	29	16	-	-	-	-	-	-	29	16	-	-	45
(3) Non-pulmonary...	-	-	-	-	4	10	4	3	4	10	4	3	21
C —Number of cases included in A and B written off the Dispensary Register during the year as :—													
(1) Recovered	4	5	-	-	-	4	6	1	4	9	6	1	20
(2) Dead (all causes) ...	13	18	-	1	1	2	-	-	14	20	-	1	35
(3) Removed to other Areas	5	4	-	-	-	1	-	1	5	5	-	1	11
(4) For other reasons ...	1	-	-	-	-	1	-	-	1	1	-	-	2
D.—Number of definite cases of Tuberculosis on the Dispensary Register on 31st December, 1947 ...	215	123	9	2	23	16	28	4	238	139	37	6	420

MAINTENANCE ALLOWANCES FOR PATIENTS AND DEPENDANTS.

Number of individual patients receiving allowances of one kind or another, or in combination, on 1st January, 1947 32

During the twelve months ended 31st December, 1947 the following applications were dealt with :—

<i>Applications received.</i>	<i>Maintenance Allowances</i>	<i>Discretionary Allowances</i>	<i>Special Payments</i>
Eligible and assessment made	60	22	2
Ineligible according to conditions of Memo. 266/T of Ministry of Health	7	21	5
	<hr/>	<hr/>	<hr/>
	67	43	7
	<hr/>	<hr/>	<hr/>

Average grant per week per eligible applicant :—

Maintenance Allowances	£1-10s.-1d.
Discretionary Allowances	2s.-5d.
Special Payments	8s.-9d.

Number of patients transferred from Public Assistance Out-Relief to Tuberculosis Maintenance Allowances 3

Gross amount of allowances payable weekly to patients on 31st December 1947 £80-1s.-8d.

Number of patients who have received maintenance allowances during the twelve months ended 31st December, 1947 :—

Maintenance Allowances	91
Discretionary Allowances	31
Special Payments	3

Number of individual patients receiving allowances of one kind or another, or in combination, on 31st December, 1947 36

Amount paid during the twelve months ended 31st December, 1947 :—

Maintenance Allowances	£3,594-12s.1d.
Discretionary Allowances	52-16s.-0d.
Special Payments	16-12s.-8d.

Total payments during 1947 (excluding refunds and transfers to P.A.C.) £3,664-0s.-9d.

The administration of the Government scheme of allowances is working smoothly and on much the same lines as in the Administrative County. The records of applications for allowances are kept by the County Council, who now also make the assessment. For convenience, however, payment is still made to patients by the Borough Treasurer of Blackburn.

MASS MINIATURE RADIOGRAPHY

REPORT ON THE SURVEY IN THE COUNTY BOROUGH OF BLACKBURN

I am indebted to Dr. F. C. S. Bradbury, Central Consultant Tuberculosis Officer to the Lancashire County Council, for the following report :

At the request of the Borough Health Committee, the Lancashire County Council Mass Radiography Unit carried out a survey in the County Borough of Blackburn from the 27th November, 1946, to the 28th April, 1947.

Difficulty was experienced in finding adequate premises, but eventually, through the efforts of Dr. V. T. Thierens, Medical Officer of Health, the Unit was installed at the works of Messrs. Phillips, Ltd., at Little Harwood.

The various industrial establishments, with two exceptions, expressed their willingness to co-operate and allowed the Organising Secretary of the Unit to address meetings in their factories.

The following table shows the total number of persons examined by mass radiography :

	<i>Males</i>	<i>Females</i>	<i>Total</i>
Staffs of Corporation Departments	1743	1194	2937
Employees of Blackburn works establishments	4796	6090	10886
Individual members of the general public in Blackburn ...	90	156	246
Employees from works, offices, etc., in the surrounding County area	2621	1122	3743
	<u>9250</u>	<u>8562</u>	<u>17812</u>

Divided according to the home address of the examinees, the figures were :—

	<i>Males</i>	<i>Females</i>	<i>Total</i>
Residents in the County Borough of Blackburn	5939	6316	12255
Residents in the County area	3181	2206	5387
Residents in other areas	130	40	170
	<u>9250</u>	<u>8562</u>	<u>17812</u>

Excluding the individual members of the public who were examined, the statement below gives the total number of persons employed at the various establishments, the number of such employees who volunteered to be examined and the number actually x-rayed :

				BLACKBURN C.B.		COUNTY AREA	
				Male	Female	Male	Female
Total number available	...	...	...	13823	13467	5237	2184
Number of acceptances	...	...	...	7700	8330	2895	1165
(Percentage of total available)	...	...	...	(55.7%)	(61.8%)	(55.3%)	(53.3%)
Number actually x-rayed	...	...	...	6539	7284	2538	1053
(Percentage of total available)	...	...	...	(47.3%)	(54.1%)	(48.5%)	(48.2%)

Thus the percentages of workpeople actually x-rayed in the County Borough of Blackburn were for males 47.3 per cent. and females 54.1 per cent. of the total number available, with a combined figure of 50.7 per cent. Analogous returns for the County area were 48.5 per cent. for males, 48.2 per cent. for females, with a combined figure of 48.4 per cent.

The response must be regarded as unsatisfactory although it has to be recognised that many difficulties were encountered. The Unit was situated on the outskirts of the town but adequate transport was provided to offset this. The weather between the beginning of February and the end of March was very severe, the snowfall being exceptionally heavy in East Lancashire. On two occasions, buses were completely prevented from reaching the Unit. As a result, arrangements fell through at the last minute and necessitated readjustments. Many of the firms realised the difficulties and co-operated wholeheartedly but others felt that further permission to attend could not be granted. An additional problem arose during February — namely, the industrial standstill throughout the country owing to the coal shortage — but fortunately our work was regarded as a priority and we were provided with electricity for our own use. The fact, however, that factories were not working made it difficult to predict how many people would be available at any particular industrial establishment when the transport arrived. In the Borough, the inclement conditions resulted in a number of people failing to attend for examination although they had previously volunteered, and in the County area a number of firms took the view that production must now be increased to compensate for the standstill and could not grant their workpeople time to attend the Unit. The effect of these unexpected difficulties on the figures make it justifiable to assume that they had a definite deleterious influence.

Arrangements were made for the general public, including housewives, to attend for x-ray but, as in the case of another County Borough, the response was poor (90 males, 156 females).

School leavers and secondary and technical scholars over 14 years of age were examined. In the under-15 group, 507 boys and 602 girls attended for x-ray; one active case of tuberculosis was found — a boy of 14.

The greatest number of females examined was in the 15-24 age group

but in spite of this there was no preponderance of active cases amongst these compared with the 25-34 and 35-44 female age groups.

It is gratifying to report that, while one patient refused to attend the dispensary when advised to do so, all the others who agreed to further investigation were subsequently seen by the Tuberculosis Officer. Many of these were referred through their own general practitioners and the excellent co-operation of the doctors cannot be too highly commended.

In the County Borough area, 380 persons were recalled for large films — 3.1 per cent. of the number x-rayed, but 17 of these failed to attend — 4.5 per cent. of the total recalled ; the figures for the County area were 126 large films (2.3 per cent.) with 11 absentees (8.7 per cent). The percentage of people failing to come to the Unit a second time is a little higher than usual.

Of the 12,255 examinees who resided in the County Borough of Blackburn, 11,363 were normal, 416 were found to have non-tuberculous abnormalities and 454 were discovered with tuberculous conditions ; 3 tuberculous cases were already on the dispensary register, 18 persons failed to attend for repeat miniature or large film and consequently could not be diagnosed, and 1 case is still undiagnosed — probably a case of tuberculosis, but as the patient refused to attend the dispensary it was impossible to decide the question of activity.

Taking the 454 persons with tuberculous conditions, the findings are as given below :

Active pulmonary tuberculosis :

(Including 10 positive sputum cases) 25— 2.0 per 1,000 examinees.

Inactive pulmonary tuberculosis :

(a) Referred to dispensary	61	} 86— 7.0 per 1,000 examinees.
(b) Referred to own doctor	21	
(c) Refused treatment	4	

Healed pulmonary tuberculosis..... 343—28.0 per 1,000 examinees.

It will be noted that healed tuberculosis was found to the extent of 28.0 cases per 1,000 examinees, but the finding is of no practical importance since healed tuberculosis is neither a personal nor a public health problem.

Active tuberculosis was found in 2.0 cases per 1,000 examinees, and this is definitely an important finding. It is not, however, a complete statement of the position and requires to be considered in conjunction with the “ inactive ” group.

The group classified as inactive tuberculosis consists of those in whom the disease was in process of healing, or possibly healed already, but the evidence was considered insufficient to justify an immediate opinion. The majority of these persons were referred to the dispensary for observation. Those who were not referred to their own doctors or refused treatment. One-fifth of

these inactive cases ultimately required dispensary supervision and represent cases of sufficient importance to warrant grouping them with the active cases as cases of significant tuberculosis.

In the light of the foregoing explanation, the above table may be rewritten as follows :

Cases of significant tuberculosis :

(a) Active	25	} 42— 3.4 per 1,000 examinees.
(b) Inactive	17	

Cases of non-significant tuberculosis :

(b) Inactive	69	} 412—33.6 per 1,000 examinees.
(b) Healed	343	

During the first of the eight surveys carried out by the Mass Radiography Unit, the rates were : Cases of significant tuberculosis 4.6 per 1,000, cases of non-significant tuberculosis 25.8 per 1,000.

From the public health standpoint the important function of mass radiography is the discovery of the infectious case. Of the Blackburn residents, 10 sputum-positive cases of pulmonary tuberculosis were found equal to a rate of 0.8 new positive cases per 1,000 examinees ; the rate for the first eight surveys being 1.1 per 1,000.

Twenty-one of the 42 significant cases found among Blackburn residents were recommended for sanatorium treatment, equal to a rate of 1.7 per 1,000 examinees, compared with a rate of two per 1,000 in the first eight surveys by the Unit. But the incidence of pulmonary tuberculosis in Blackburn and East Lancashire is known to be less than average, so that the result of the survey accords with expectation.

Although the primary object of mass radiography is to detect pulmonary tuberculosis, it is to be expected that a number of other abnormal conditions will be found during the routine examinations of large numbers of chests.

Non-tuberculous abnormalities were discovered in 416 cases but in the great majority no action was required. A brief analysis of the cases who were referred to their own doctor or a hospital for investigation or treatment is given below :

Bronchitis, bronchiectasis	10
Pulmonary and basal fibrosis	6
Cardio-vascular lesions	6
Pleural effusion, pleural thickening	4
Intra-thoracic new growths	4
Pneumokoniosis	1
Eventration of diaphragm	1
Bony thorax	1

— 33— 2.6 per 1,000 examinees.

PART VI

Venereal Diseases

VENEREAL DISEASES.

The Royal Infirmary Clinics

Four hundred and two cases, of whom 203 were Blackburn residents, attended the Royal Infirmary Centre for the first time during the year. Of the Blackburn cases 89 were suffering from gonorrhœa, 53 from syphilis, and 61 from conditions non-venereal.

The appended Table shows the number of new cases seen yearly at the Royal Infirmary since 1937 :

<i>Year.</i>		<i>Male.</i>		<i>Female.</i>		<i>Total.</i>
1937	..	459	..	241	..	700
1938	..	416	..	265	..	681
1939	..	434	..	227	..	661
1940	..	318	..	174	..	492
1941	..	338	..	201	..	539
1942	..	383	..	242	..	625
1943	..	459	..	284	..	643
1944	..	335	..	274	..	609
1945	..	233	..	187	..	420
1946	..	402	..	159	..	561
1947	..	278	..	124	..	402

The total number of attendances for all patients was 11,672, 6,172 of which were in respect of Blackburn residents. The aggregate number of in-patient days at the Royal Infirmary was 238.

During the year 59 males and 34 females ceased to attend the Clinic before completion of the full course, and 35 cases, 21 males, and 14 females discontinued attendance after completion of treatment, but before final tests for cure had been carried out.

(b) The Victoria Street Centre :

This centre is for the treatment of women maritally infected, and of children congenitally or accidentally infected. The Clinic forms part of the Maternity and Child Welfare Scheme, and all cases referred for treatment have passed through the Welfare Centres or Ante-Natal Clinics.

At the beginning of the year 43 females were under treatment for syphilis and 20 for gonorrhœa. In the course of the year the following cases were dealt with for the first time :—Syphilis, 14 ; Gonorrhœa, 7 ; non-venereal conditions, 87. The total number of attendances made was 1,097.

New Methods of Treatment—I am indebted to Dr. A. Sebba, Venereologist at the Royal Infirmary for the following notes on the treatment of Venereal Diseases by Penicillin, Sulphonamide therapy and BAL.

Penicillin is proving as efficacious as Sulphonamides in markedly decreasing the incidence of complications of Gonorrhoea in both male and female patients. In the latter, however, the problem of secondary infection has to be dealt with in a proportion of cases.

Oral Penicillin tablets are not being prescribed at the Clinic for the treatment of this disease, as failure on the patient's part to take the tablets as recommended may result in creating Penicillin-resistant strains : furthermore the possibility of masking Syphilis has to be borne in mind.

Sufficient time has not yet elapsed to assess the real value of Penicillin therapy in Syphilis. The difficulty of drawing any definite conclusions is accentuated by the lack of a standardisation of follow up after the use of this reagent. All cases of this disease receive at least one course of the older remedies in addition to Penicillin.

BAL (British Anti-Lewisite) has proved of inestimable value in several severe cases of Arsenical Dermatitis.

PART VII

Maternal and Child Health

Ante-Natal Clinics.—Four ante-natal clinics (in addition to that conducted fortnightly by the Consultant Obstetrician) are held weekly in the Public Health Department.

A weekly ante-natal clinic is held at Springfield Maternity Home by one of the Assistant Medical Officers of Health and, in addition, ante-natal supervision is carried out by the Matron and staff.

In connection with the Municipal Midwifery Service, which is administered on behalf of the Authority by the Blackburn District Nursing Association, ante-natal supervision of all cases booked is exercised by the Municipal Midwives and special cases are referred to a clinic which is held once a fortnight by an Assistant Medical Officer of Health.

Appended are particulars of attendances at the Ante-natal Clinics :—

TABLE 35

	Public Health Department	Springfield Maternity Home.	Municipal Midwifery Service	Total
<i>By Medical Officers.</i>				
No. of sessions	193	32	20	245
No. of patients attended ...	537	444	197	1178
No. of attendances	2961	663	230	3854
<i>By Midwives.</i>				
No. of sessions ... ..	...	75	203	278
No. of patients attended ...	...	444	637	1081
No. of attendances ... ..	...	1897	3958	5855

Nine hundred and fifty one specimens of blood were taken from patients attending the Ante-Natal Clinics and submitted to the Wassermann test. Seven only proved positive.

Medical Clinic for Ante-Natal Cases. As mentioned in my last Annual Report a clinic conducted by Dr. A. L. McAdam, Consultant Physician, was started in November, 1946. The clinical findings and the obstetric results have proved of the greatest interest and benefit and stress the importance of this clinic to the welfare of pregnant women.

I am indebted to Dr. McAdam for the following details :—

Total number of sessions held from Nov. 5/1946 to Dec. 31/1947	...	...	...	25
Total number of new patients seen Nov. 5/1946 to Dec. 31/1947	...	...	...	209
Patients re-examined	...	...	...	105

Diagnosis arrived at :—

Mitral stenosis	...	..	..	...	...	...
with normal rhythm	...	...	...	...	26	|
with auricular fibrillation	..	...	...	...	1	} 28
with congestive failure	...	...	...	...	1	|
Mitral Stenosis and Aortic Incompetence	...	..	...	...	7	}
Aortic Incompetence	...	...	...	...	...	2
Cardiac arrhythmias	...	...	...	...	...	...
paroxysmal tachycardia	...	...	...	...	2	|
sinus arrhythmia	...	...	...	...	2	} 6
extra systolic	...	...	...	...	2	|
Sinus Tachycardia	...	...	...	...	...	1
Functional systolic bruit	...	...	...	...	...	8
Physiological 3rd sound	...	...	...	...	...	2
Hypertension	...	...	...	...	...	2
Hypertension with toxic myocarditis	...	...	...	...	...	1
Congenital cardiac disease	...	...	...	...	...	...
patent inter-ventricular septum	...	...	...	...	1	|
patent ductus arteriosus...	...	...	...	...	2	} 4
subaortic stenosis	...	...	...	...	1	|
Mild cardiac hypertrophy of uncertain etiology...	...	...	...	...	...	1
Nutritional anaemia	...	...	...	...	...	8
Cholecystitis	...	...	...	...	...	1
Thyrotoxicosis	...	...	...	...	...	1
Simple goitre	...	...	...	...	...	2
Pyelonephritis	...	...	...	...	...	1
Functional albuminuria	...	...	...	...	...	1
Dyspituitarism	...	...	...	...	...	1
Infective Polyarthritits	...	...	...	...	...	1

Extra Investigations required :—

X-ray (additional to routine fluoroscopy carried out at Victoria Street)	13
Electrocardiograph	16
Blood count	11
Blood for Rh antibodies	1
Blood Sugar Ratio	1
Wassermann Reaction and Urine analysis	1

Final Recommendations and Outcome.—All patients showing evidence of organic heart disease were admitted to Queen's Park Hospital at periods varying from one week to four months prior to their expected date of delivery for preliminary rest, and arrangements were made in all these cases for Mr. Liggett to conduct the confinement. Every patient was successfully delivered and there were no maternal or foetal deaths.

In the case of patients who had arranged to be confined elsewhere a letter was sent to their own Doctor giving details of the clinical findings.

A number of patients were advised to undergo sterilisation after their confinement, and where consent was given Mr. Liggett arranged to carry out this procedure.

All cardiovascular patients were seen subsequently by me at Queen's Park Hospital, and certain women were also seen at Victoria Street as a follow up.

A. L. McADAM.

Post-Natal Clinic.

Number of Sessions held	50
Number of Attendances made	126
Number of Individuals	64
Number of abnormal cases	44
Number of cases in which no abnormality was found	20

Particulars of Abnormal Cases as set out below :

Retroversion of uterus	8
Prolapse of uterus	2
Vaginal discharges	3
Painful breasts	1
Perineal tear	1
Cystitis	1
Laceration of cervix uteri	1
Erosion of cervix uteri	8
Sterility	5
Intra cervical polyp.	1
Cystocele	8
Incomplete abortions	1
Painful coccyx	1
Anaemia	3

Midwives' Report.—Seventy two midwives, all of whom are State Certified, notified their intention to practise during 1947.

On December 31st, 1947, there were 2 independent midwives, 22 midwives attached to the District Nurses' Home, and seven Municipal midwives on the register.

Visits.—Three special visits and 10 routine visits (1 of which was ineffective) were paid to the Midwives' homes during 1947. Bags, case registers, and ante-natal records were inspected at each visit.

There are no private Maternity Homes in Blackburn.

MEDICAL AID FORMS RECEIVED DURING 1947

Pre-natal conditions	...	..	.	.	..	25
Abnormalities of labour	...	..	..	..	..	246
Post-natal conditions	..	..	..	.	..	22
Infants' defects	...	..	..	..	..	65
						—
Total	.	.	.	.	.	358
						—

Municipal Midwifery Services—The Municipal Midwifery Service is administered by the Blackburn District Nursing Association on behalf of the Welfare Authority. I append particulars of the work done during the year.

The arrangements have worked most efficiently and there is close and friendly co-operation between the Association and this Department.

Seven full time municipal midwives are employed for the purposes of the service and the Queens Nurses are available in emergencies and as reliefs.

No. of confinements attended during 1947 by Municipal Midwives	...	888
No. of confinements at which a doctor was also present	...	164
No. of confinements attended by Midwife alone	...	724
No. of visits paid by midwives	...	15544

Consultant Obstetrician and Gynaecologist.—I am indebted to Mr. S. W. Liggett, F.R.C.S., M.R.C.O.G., for the appended particulars.

The gynaecological and obstetrical work at Queen's Park Hospital, emergency gynaecological admissions to the Royal Infirmary, supervision of Springfield and the conduct of special ante-natal clinics at Victoria Street is carried out by the Consultant Obstetrician. A second Consultant Obstetrician has been appointed and commenced duty in February, 1948.

In February, hospital bookings were so heavy at Queen's Park Hospital, that it was necessary to put a priority system into operation. This system worked satisfactorily and by July, due to the reduced number of bookings, was modified to provide for the admission of all primigravidæ applying for admission. The bookings are still too heavy to permit the admission of normal multigravidæ whose home conditions allow of domiciliary confinement.

ANTE-NATAL ADMISSIONS—*continued*.

Haematuria	1
Renal calculus	3
Glycosuria... ..	4
Jaundice	2
Bronchiectasis	1
Rhesus negative	3
Post influenzal debility	1
Malnutrition	1
Mental instability	1
Tape worm	1
Contracted pelvis... ..	6
Overdue	4
Awaiting labour	7
Previous Caesarian Section	3
Hydramnios	1
For C.S. and Hysterectomy	2
Twins	3
Hydrocephalus	1
Anaemia	3
Bronchitis	2
Malaena	1
Scabies	1
Disseminated sclerosis	1

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At Springfield there were 400 confinements during 1947. Twenty nine cases required the services of the Consultant. Other minor abnormalities were dealt with by the local general practitioners. There were no maternal deaths.

At both the Maternity Department at Queen's Park and Springfield cases of puerperal pyrexia due to haemolytic streptococcus occurred from time to time, all of which were investigated and appropriately dealt with. There were no deaths from this condition.

At the Consultant Clinics cases are seen which are referred by Ante-natal Officers and also occasional cases sent for opinion by General Practitioners.

At present one gynaecological clinic, at which an average of 25 patients attend, and one gynaecological operating session are held each week at the Royal Infirmary for which there are long waiting lists. It is regretted that no further figures are available.

The following Table gives particulars of Clinics conducted by the obstetrician.

TABLE 33

Place	Number of Clinics	Attendances.
Queen's Park Hospital (Blackburn cases)	52	4250
Queen's Park Hospital (Extra Borough)	52	
Victoria Street	25	328
Darwen	25	410
Oswaldtwistle... ..	24	2094
Clayton-le-Moors	13	
Rishton	13	
Great Harwood	24	
Post-natal, Queen's Park Hospital	52	

SPRINGFIELD MUNICIPAL MATERNITY HOME.

PARTICULARS AS TO ACCOMMODATION AND CASES DEALT WITH.

1. Number of Maternity Beds in the Institution (exclusive of Isolation and Labour Beds) at 31st December, 1947 20
2. Number of Beds, if any, included under item 1 which have been allocated to, and reserved for, expectant mothers in need of hospital treatment... 1-
3. Number of Maternity Cases admitted during the year 428
- 3a. Number of women treated during the year in the beds shown against item 2. (These women should be included also against item 3) 4
- 3b. Average duration of stay of expectant mothers in the ante-natal beds shown against item 2 7 days
4. Average duration of stay of cases in the lying-in wards 11 days
5. Number of Cases delivered by—
 - (a) Midwives 352
 - (b) Doctors 48
6. Number of Cases in which Medical Assistance was sought by a midwife in emergency 60
7. Number of cases admitted after delivery (these cases are also included in item 3) 2
8. Number of Cases notified as—
 - (a) Puerperal Fever None
 - (b) Puerperal Pyrexia 3
9. Number of Cases of Pemphigus Neonatorum... .. None
- 10a. Number of infants who have at any time received a supplementary or complementary feed while in the Institution (excluding those given during the first three or four days while breast feeding is being established) 25

10b. Number of Infants wholly breast-fed on leaving the Institution	375
11. Number of Cases notified as Ophthalmia Neonatorum	None
12a. Number of Maternal Deaths	None
13a. Number of Infant Deaths—	
(i) Stillborn	4
(ii) Within 10 days of Birth	4
13b. Cause of Death in each case, and results of post-mortem examination (if obtainable):	
i. Congenital heart	
ii. Prematurity.	
iii. Prematurity.	
iv. Prematurity.	

Still-births—

- i. Macerated.
- ii. Impacted shoulders.
- iii. Hydrofoetalis.
- iv. Torn Tentorium by P.M.

QUEEN'S PARK HOSPITAL.

PARTICULARS AS TO MATERNITY ACCOMMODATION AND CASES DEALT WITH

1. Number of maternity beds in the Institution (exclusive of isolation and labour beds) at 31st December, 1947	58
2. Number of beds, if any, included under item 2 which have been reserved for expectant mothers in need of hospital treatment	12
3. Number of maternity cases admitted during the year	1520
3a. Number of women treated during the year in the ante-natal beds shown against item 2. (These women should be included also against item 3)	272
3b. Average duration of stay of expectant mothers in the ante-natal beds shown against item 2	14·9 days
4. Average duration of stay of cases in the lying-in wards	11·8 days
5. Number of cases delivered by—	
(a) Midwives	996
(b) Doctors... ..	205
6. Number of cases in which medical assistance was sought by a midwife in emergency	571
7. Number of cases admitted after delivery. (These cases should be included in item 3)	31
8. Number of cases notified as—	
(a) Puerperal fever	Nil.
(b) Puerperal pyrexia	52
9. Number of cases of pemphigus neonatorum	2
10. (a) Number of infants who have at any time received a supplementary or complementary feed while in the Institution (excluding those given during the first three or four days while breast feeding is being established)	109
(b) Number of Infants wholly breastfed on leaving the Institution ...	1015

11. (a)	Number of cases notified as ophthalmia neonatorum	15
(b)	Result of treatment in each case. Complete cure in all cases.	—
12.	Number of Maternal Deaths.	5
13a.	Number of Stillbirths	59

(i) Cause of death in each case :—

1. Hydrocephaly : Twin pregnancy : Pre-eclampsis—4 lbs.
2. Unknown, probably maternal syphilis—6lbs. 3ozs.
3. Intra-cranial haemorrhage due to very rapid descent of the head—6lbs. 3ozs.
4. Intra-cranial haemorrhage—6lbs. 11 ozs.
5. Premature onset of labour—3 lbs. 2 ozs.
6. Cerebral haemorrhage due to difficult forceps delivery—8 lbs. 11 ozs.
7. Anencephaly—3 lbs. 10 ozs.
8. Maternal A.P.H., Placenta Praevia—4 lbs. 3 ozs.
9. Interference with foetal circulation due to prolonged 2nd stage, forceps delivery—5 lbs. 7 ozs.
10. Unknown—3 lbs. 10 ozs.
11. Spina Bifida, Hydrocephalic—5 lbs. 14 ozs.
12. Unknown, admitted with foetal death, macerated—3 lbs. 6 ozs.
13. Anencephaly—3 lbs. 15 ozs.
14. Prolonged labour, forceps delivery—3 lbs. 5 ozs.
15. Prematurity, severe maternal pre-eclamptic toxæmia—3 lbs. 14 ozs.
16. Cause unknown, admitted as foetal death—4 lbs. 8 ozs.
17. Cause unknown, admitted as foetal death, macerated—4 lbs.
18. Severe eclampsia—2 lbs. 10 ozs.
19. Unknown, twin pregnancy, admitted as foetal death—3 lbs. 7 ozs.
20. Unknown, twin pregnancy, admitted as foetal death—3 lbs. 6 ozs.
21. Intrapartum death due to asphyxia due to inspiration in utero—6 lbs. 2 ozs.
22. Triplets, one of, premature labour—2 lbs. 15 ozs.
23. Cause unknown—7 lbs.
24. Toxæmia, concealed and revealed accidental haemorrhage—5 lbs. 8 ozs.
25. Impacted breech, large baby, difficult delivery of shoulders and aftercoming head—10 lbs. 6 ozs.
26. Cause unknown, admitted as foetal death—5 lbs.
27. Hydrocephaly, Spina Bifida—6 lbs. 10 ozs.
28. Prolapsed cord—6 lbs. 9 ozs.
29. Accidental ante-partum haemorrhage—3 lbs. 14 ozs.
30. Anencephaly—4 lbs.
31. Cause unknown—4 lbs. 8 ozs.
32. Unknown : admitted with foetal death—3 lbs. 13 ozs.
33. Ruptured uterus—6 lbs. 15 ozs. (old C.S. scar).
34. Anencephaly—2 lbs.
35. Accidental ante-partum haemorrhage—4 lbs. 4 ozs.
36. Unknown : admitted with foetal death—5 lbs. 8 ozs.
37. Obstructed labour—6 lbs. 1 oz.
38. Admitted as foetal death : obstructed labour—6 lbs. 8 ozs.
39. Admitted as foetal death : Rh. negative blood with antibodies—2 lbs. 10 ozs.
40. Admitted as twins : cause unknown—first macerated.
41. Anencephalic—4 lbs. 11 ozs.
42. Hydrocephalus—4 lbs. 0 ozs.
43. Cause unknown : macerated—2 lbs. 9 ozs.

44. Cause unknown : macerated—2 lbs. 8 ozs.
45. Admitted as foetal death : macerated—8 lbs. 8 ozs.
46. Macerated : probably sy. (Spec. Clinic)—5 lbs. 10 ozs.
47. Foetal distress : forceps delivery : asphyxia—6 lbs. 4 ozs.
48. Maternal toxæmia—3 lbs. 13 ozs.
49. Foetal heart not heard on admission : ? cause—6 lbs. 8½ ozs.
50. Anencephalic—5 lbs. 3½ ozs.
51. Obstructed labour : failed forceps prior to admission—8 lbs. 2 ozs.
52. No cause found at P.M. : ? Rh.—8 lbs. 5 ozs.
53. Admitted as foetal death : macerated—4 lbs.
54. Twin pregnancy : premature—1 lb. 8 ozs.
55. Placenta prævia : prolapsed cord—7 lbs. 4 ozs.
56. Unknown : admitted as foetal death—4 lbs. 7 ozs.
57. Maternal pre-eclampsia—2 lbs. 6 ozs.
58. Unknown : admitted as foetal death—5 lbs. 4 ozs.
59. Cerebral hæmorrhage due to asphyxia due to premature separation of the placenta—6 lbs. 8 ozs.

13b. Number of Infant Deaths within Ten Days of Birth 29

ii. Cause of death in each case :—

1. 1 day—circulatory insufficiency due to cerebral congestion following instrumental delivery—7 lbs. 9 ozs.
2. 1½ hours—insufficient vitality due to prematurity—2 lbs. 10 ozs.
3. 2 days—insufficient vitality due to prematurity—3 lbs. 9 ozs.
4. 7 days—Spina Bifida—5 lbs. 10 ozs.
5. 5 mins.—insufficient vitality due to prematurity—1 lb. 14 ozs.
6. 2 days—insufficient vitality due to prematurity—2 lbs. 2 ozs.
7. 6¾ hours—insufficient vitality due to prematurity—3 lbs. 12 ozs.
8. 2 days—Toxaemia, intestinal obstruction, imperforate anus and congenital atresia of recto-sigmoid junction—6 lbs. 5 ozs.
9. 1 day—Atelectasis Pulmonae—5 lbs. 12 ozs.
10. 4 days—Asphyxia, Atelectasis Pulmonae—4 lbs. 8 ozs.
11. 2 days—Asphyxia, Atelectasis Pulmonae, insufficient vitality due to prematurity—3 lbs. 5 ozs.
12. 2 days—insufficient vitality, congenital malformation of heart (Tricuspid Stenosis)—6 lbs. 4 ozs.
13. 3 days—Atelectasis of Lungs, Congenital Hydrocephalus—5 lbs. 5 ozs.
14. 10 days—insufficient vitality, prematurity—2 lbs. 1 oz.
15. 12 hours—insufficient vitality, prematurity—2 lbs. 6 ozs.
16. 1 day—prematurity, plural pregnancy—2 lbs. 15 ozs.
17. 1 day—insufficient vitality, prematurity—2 lbs. 10 ozs.
18. 2 days—Asphyxia due to unknown cause—8 lbs. 4 ozs.
19. 6 days—Basal Fibrinous Meningitis—Pneumonia—5 lbs. 6 ozs.
20. ½ hour—cerebral hæmorrhage, birth injury—7 lbs. 4 ozs.
21. 2½ hours—prematurity, immaturity—2 lbs. 8 ozs.
22. 3 days—prematurity and debility—5 lbs. 1 oz.
23. 20 hours—prematurity,—2 lb. 9 ozs.
24. 2 days—prematurity, immaturity—1 lb. 8 ozs.
25. 2 days—prematurity, immaturity—1 lb. 9 ozs.
26. 2 days—congenital heart, single chamber ventricle—5 lbs. 8 ozs.
27. 1 day—insufficient vitality due to prematurity—2 lbs. 5 ozs.
28. 1 hour—insufficient vitality due to prematurity—1 lb. 15 ozs.
29. 3 hours—Atelectasis due to prematurity—4 lbs. 11ozs

Puerperal Pyrexia.—Sixty-two cases, none of which terminated fatally, were notified during the year.

Number of cases notified	...	...	...	...	...	...	62
Borough cases	...	...	...	...	...	...	42
Out of Borough cases	...	...	...	...	...	...	20
Cases occurring in Hospital	...	...	...	...	...	...	37
Cases occurring at home	...	...	...	...	...	...	5

Maternal Mortality.—There were nine maternal deaths in the Borough, eight in institutions and one at home. Five of the deaths, of which particulars are given below, were of Blackburn residents. Two of these cases (B and C) were possibly preventable. The extra-borough fatalities are not analysed as they do not come within the purview of this Report.

(A) Primip. aged 23.

Certified cause of death “Anaesthetic Shock.”

Patient was undergoing external version, open chloroform being the anaesthetic. She suddenly collapsed and died. The case was subject of an inquest. Verdict “Misadventure.”

(B) Multip. aged 36.

Cause of death “Cardiac syncope due to haemorrhage produced by an abortion of about two months pregnancy.”

The patient received no ante-natal care. She had bled for two days before medical aid was summoned, and lived four hours thereafter. Her husband refused to allow her to go to hospital.

The consultant obstetrician states “In view of the fact that she lived four hours after being seen I think one must conclude that had she been moved to hospital then, or, better still, had blood been brought to her home and a transfusion given there, she might have been saved.”

Death was favoured by inadequate obstetric facilities (readily available on demand) plus lack of co-operation on the part of the patient’s husband.

(C) Primip. aged 21.

Cause of death (1) Cardiac failure ; (2) Paralytic ileus ; (3) Toxaemia ; (4) Hyperemesis Gravidarum and Broncho-Pneumonia.

Admitted to hospital at end of September, 1946, for investigation of gastro-intestinal tract and chest. She was unmarried, gave a history of "bilious attacks" but none of pregnancy which was neither suspected nor diagnosed. Her last menstrual period was some six weeks before admission. A thorough general investigation revealed no abnormality and she was discharged home on the 12th day.

Admitted to the ante-natal ward on February 5th with signs of toxæmia after diagnosis of pregnancy by a general practitioner who secured her consent to hospital treatment only with difficulty and after much delay. Four days after admission she developed pneumonia followed by acute abdominal distension. Death occurred eight days after admission, the cause of death as certified being confirmed by post-mortem.

The Obstetric Consultant comments as follows "This maternal death must in some measure be attributed to the failure to arrive at a correct diagnosis when she was admitted and investigated for vomiting in September, 1946. It might still have been prevented if the patient had not refused to return to hospital when the correct diagnosis was made by the G.P. in attendance."

(D) Primip. aged 28.

Cause of death "Acute congestive heart failure, Rheumatic Myocarditis."
This case was 6 months pregnant and died before labour began.

(E) Primip. aged 29.

Cause of death "Congestive heart failure, Mitral Stenosis, Chronic Rheumatic Carditis, Pregnancy."

This case was 6 months pregnant and died before labour began.

NOTIFICATION OF BIRTHS

			<i>Live Births</i>		<i>Still Births</i>		<i>Total</i>
Doctors	...	...	3	...	0	...	3
Midwives	...	...	1387	...	20	...	1407
Parents and others	...	...	1164	...	59	...	1223
			<hr/>		<hr/>		<hr/>
TOTALS	...	...	2554	...	79	...	2633
			<hr/>		<hr/>		<hr/>

In addition to the above, 56 premature infants were born in the Borough to mothers normally residing outside the borough.

Prematures born in hospital are there retained until their physical condition is such that the mother, with the assistance of the Health Visitors and other resources of the Health Department, might reasonably be expected to rear the children at home.

Special oversight of premature children, who are nursed at home, is exercised by the health visiting staff. Electric blankets, hot water bottles, additional clothing, etc., are available as required.

Infantile Mortality.—During the year there were 85 deaths of infants. This figure corresponds to an infantile mortality rate of 41·0 per 1,000 live births registered, compared with 60·2 in 1945 and 41·8 in 1946.

Of the deaths registered 79 were of legitimate and six of illegitimate children. The rate of infantile mortality amongst legitimate infants was 39·9 per 1,000 legitimate births registered, and amongst illegitimate children 63·8 per 1,000 illegitimate births registered.

Of the deaths certified 45, or 52·9%, occurred within the first month of life. The more important causes of these deaths were as follows :—

<i>Cause.</i>	<i>Number of Deaths.</i>							
Premature Birth	21
Congenital defect	18
Pneumonia	2

COMPARISON OF BLACKBURN INFANTILE MORTALITY RATE WITH THAT OF ENGLAND AND WALES FROM 1938—1947

	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947
Blackburn	67	57	77	52	63	58	45	60	42	41
England & Wales	53	50	55	59	49	49	46	46	43	41

Ophthalmia Neonatorum.—Twenty-two cases were notified during the year. In three cases the confinements had taken place at home, and nineteen in Institutions, of which six were out-of-Borough cases. Two cases were removed to the Blackburn Corporation Hospital.

Of the 16 Borough cases, one died and in the remaining 15 cases vision was unimpaired.

Maternity and Child Welfare Centres. — There are eight Maternity and Child Welfare Centres in the Borough, situated at Bent Street, Bolton Road, Kendal Street, Griffin Parochial Hall, Bentham Street, Cornelian Street, Hozier Street and Lower Darwen. Two sessions are held each week at Hozier Street and Kendal Street. The Lower Darwen Clinic is held once each fortnight.

In the following Table it will be noted that the attendances numbered 39,443 compared with 38,398 in 1946.

TABLE 37

	Bent Street	Hozier Street (2 sessions weekly)	Bolton Road	Kendal Street (2 sessions weekly)	Griffin	Cornelian Street	Bentham Street	Lower Darwen	Total
Infants :—									
New cases under 1 year	206	323	225	285	155	163	113	55	1525
No. of re-attendances	3565	5935	2990	4922	3472	2376	2282	570	26112
New cases over 1 year	19	47	12	33	6	16	6	4	143
No. of re-attendances	2024	1816	1503	1961	1344	1092	1030	345	11115
Attendances of Infants	5814	8121	4730	7201	4977	3647	3431	974	38895
Consultations with Dr....	1194	1520	975	1401	704	601	630	188	7213
Expectant Mothers—									
No. of new cases ...	49	22	3	9	21	10	6	3	123
No. of re-attendances ...	156	123	24	23	79	11	15	11	442
Total Attendances of Expectant Mothers ...	205	145	27	32	100	21	21	14	565
Total Attendances ...	6019	8219	4757	7263	5077	3668	3452	988	39443
Average Attendance of infants per session ...	123	78	96	74	101	76	71	39	*810

* Total average attendance *each week* at all Centres.

Of the live births notified during the year 1525 or 74·8% attended the Infantile Consultation Centres.

DENTAL TREATMENT OF MATERNITY AND CHILD WELFARE CASES

Mr. H. Yates, the Senior Dental Surgeon, carried out the following work in connection with Maternity and Child Welfare Cases

				1946		1947
Number of Sessions held	..	..	..	66	..	74
Number of Patients: Mothers	..	..	..	147	..	143
Children	..	..	..	51	..	40
Permanent Teeth Extracted	..	..	.	279	..	139
Permanent Teeth Filled	..	..	..	39	..	49
Temporary Teeth Extracted	..	..	..	64	..	44
Temporary Teeth Filled	..	..	..	4	..	7
Other Operations	..	..	..	41		31
General Anaesthetics	...	...	...	57	..	50

Four full upper dentures were recommended and supplied.

TABLE 38

FEEDING OF INFANTS UP TO SIX MONTHS OF AGE—

Condition at end of 6 months	Number of infants investigated	Breast fed entirely	BREAST FEEDING ALONE UP TO END OF						BREAST FEEDING JOINTLY WITH ARTIFICIAL UP TO END OF						Artificial fed entirely	Not fed
			3 weeks	1st month	2nd month	3rd month	4th month	5th month	1st month	2nd month	3rd month	4th month	5th month	6th month		
Satisfactory	1809	546	95	102	115	129	60	27	71	58	33	26	19	27	501	—
Fairly Satisfactory	47	3	5	2	2	1	3	—	—	—	—	—	—	—	31	—
Unsatisfactory: ...	14	3	—	—	—	—	—	—	—	1	1	—	—	—	9	—
Dead	17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	17
	1887	552	100	104	117	130	63	27	71	59	34	26	19	27	541	17

Care of Illegitimate Children.—No direct provision is made by the Corporation for the care of illegitimate children or unmarried mothers. A grant is however, made to the Blackburn Diocesan Moral Welfare Council for this work, and the Health Department have maintained a close co-operation with the Authorities of Viewfield Hostel which, up to 31st August, 1946, was provided and maintained by the Diocesan Council for this purpose.

In 1946 the Diocesan Council decided that Viewfield was no longer suitable or adequate and ceased to use the premises as a Hostel on the 31st August of that year. They have since sold these premises and purchased more suitable premises which are situated in the Administrative County area and which were expected to be ready for occupation during 1947. Due to the shortage of labour and materials, however, the adaptation has not yet been completed.

Institutional Provision for Mothers and Children—Maternity beds are provided at Springfield Municipal Maternity Home and Queen's Park Hospital.

Special accommodation is available for infants and children at both the Royal Infirmary and Queen's Park Hospital.

NURSING AND MATERNITY HOMES.

PUBLIC HEALTH ACT, 1936.

The Homes are visited quarterly by a Lady Assistant Medical Officer of Health. All have been found satisfactory.

(a) *Maternity Homes* :—

There are no private Maternity Homes in Blackburn.

(b) *Nursing Homes* :—

At the end of the year there was one registered Nursing Home in Blackburn, providing 5 beds. During the year the registration of one Nursing Home of three beds was cancelled by the proprietor.

THE PRE-SCHOOL CHILD.

CAUSES OF DEATH IN CHILDREN FROM ONE TO FIVE YEARS OF AGE

	1946	1947
Pneumonia and Bronchitis	4	4
Infectious Diseases (Non-Tubercular)	6	5
Tuberculosis (all forms)	1	1
Digestive System Diseases	1	—
All other causes	5	11
TOTALS	17	21

There are now 27 Nursery Classes in Blackburn, with approximate accommodation for 1000 children under the age of five years. The work carried out at these classes has been fully described in the School Medical Report.

Child Life Protection. The appended Table gives particulars of children under the age of 9 years, boarded out day and night, for reward within the Borough:—

(a) Number of Boarded Out Children, December, 1946	...	4
(b) Number of New Cases during 1947	...	3
(c) Transferred to either parent	...	3
Out-of-Borough	...	2
In Borough	...	1
(d) At present in Borough	...	3
Found to be satisfactory	...	3
Unsatisfactory	...	—
(e) Number adopted	...	—
(f) On the register 31st December, 1947	...	4

Inspection duties were undertaken by the Health Visiting Staff, who visit each case at least once in every six weeks. All the children have been found to be well cared for.

In addition to the above, 8 children under nine years of age were boarded out at the National Children's Home. Preston New Road, at the end of 1946. Three of them attained the age of nine years during 1947 leaving 5 on the register at the end of the year.

Daily Guardians. From the 1st April, 1946, the Ministry of Labour ceased to be responsible for the administration of the Daily Guardians Scheme and the Town Council then assumed responsibility

The Scheme provides for the registration of persons caring for infants during the day whilst the parents are at work and, in respect of each case registered, the Council pay 4/- per week to the guardian as a contribution towards the amount agreed to be paid by the parents.

At the beginning of 1947, 247 guardians were caring for 295 children. During the year there were 553 new applications of which 521 were approved. Three hundred and twenty eight cases were removed from the register and at the end of the year 440 guardians were caring for 505 children. During the period £3,010-18-3 was paid by the Council to 768 guardians.

Domestic Helps and Home Helps (Combined Scheme)—At the end of 1946 there were on the register 4 Home Helps/Domestic Helps. Three new Helps were engaged during the year, but, as three had resigned, four remained at the end of the year. On four occasions temporary Home Helps were engaged for individual cases.

During the year, the following work was carried out :—

					<i>As Domestic Helps</i>	<i>As Home Helps</i>
No. of cases	...	...	...	...	14	22
No. of weeks employed	...	...	...	...	36	72
No. of hours employed	...	...	...	...	1016	2299

Domestic Helps are employed in cases of sickness and Home Helps in Maternity cases. They are paid by the Council at an hourly rate, and charges are recovered according to the circumstances of the household.

Day Nurseries. The following Table gives particulars of the Day Nursery accommodation in the Borough, together with the number of children on the register and attendances during 1947.

The children arrive at the Nurseries before 7-30 a.m., and leave after 5-30 p.m. All meals are provided and the older children are given some educational instruction. A proportion of the children attending the Day Nurseries at St. Albans Place and Intack are conveyed to and from the Nurseries by transport provided by the Council.

A charge of 1/6 per day is made to the parents of each child attending the Nurseries.

TABLE 39

	St. Alban's Place	Holden House	Intack	Total
Number of Approved places	60	31	40	131
0—2 years	20	7	..	27
2—5 years	40	24	40	104
Number of Children on the Register at end of year	72	31	40	143
0—2 years	20	7	..	27
2—5 years	52	24	40	116
Total Attendances during the year	10839	5676	6713	23228
0—2 years	2618	1251	..	3869
2—5 years	8221	4425	6713	19359

PART VIII.

Miscellaneous.

MISCELLANEOUS.

Bacteriological and Pathological Examinations.

The following Table gives details of specimens submitted by the Health Department during the year :—

TABLE 40**Blackburn and East Lancashire Royal Infirmary.**

Specimens in connection with the diagnosis and treatment of Venereal									
Diseases	...	...	...	...	...	...	...	...	3437
Specimens of Milk	...	...	...	...	...	...	...	...	1050
Specimens in connection with Infectious Diseases :—									
Tubercle Bacilli (Sputa)	...	...	...	...	...	...	...	...	406
Diphtheria Bacilli	...	}	...	...	...	...	...	...	749
Haemolytic Streptococci	...		...	...	...	...	...	...
Enteric (Widals)	...	...	...	...	...	...	...	...	19
Enteric (Other secretions)	...	...	...	...	...	...	...	...	176
Cerebro spinal fluid...	...	...	...	...	...	...	...	...	22
Other specimens	...	...	...	...	...	...	...	...	587

Manchester University.

Specimens in connection with the diagnosis and treatment of Venereal									
Diseases	...	...	...	...	...	...	...	...	3865

Edinburgh University.

Aschheim-Zondek	12
-----------------	-----	-----	-----	-----	-----	-----	-----	-----	----

Ultra Violet Light Clinic.—Two hundred and thirty-one cases (of which 87 were Maternity and Child Welfare cases and 144 School Health Service cases) attended the Ultra Violet Light Clinic which is conducted at the Health Department. They received a total of 2337 exposures from the Mercury Vapour Lamp.

Nursing in the Home.—Domiciliary nursing of cases of Measles, Whooping Cough, Diarrhoea, Puerperal Fever, Ophthalmia Neonatorum, Influenzal Pneumonia, and Tuberculosis is undertaken by the District Nursing Association.

The Corporation pay the Association an annual retaining fee of £35 for these services, with an additional payment of 8d. per visit.

The appended Table gives particulars of the work carried out by the District Nursing Association in this respect during 1947 :—

TABLE 41.

HOME NURSING BY DISTRICT NURSES.

Disease	On books Jan. 1st 1947	New Cases	Cured	Died	Hospital	Remain- ing end of 1947	Visits
Measles ... ..	...	...	...	...	...	...	...
Tuberculosis	1	7	3	3	2	...	175
Pneumonia ... ..	...	20	15	2	3	...	355
Puerperal Pyrexia ... ..	...	3	2	...	1	...	71
Ophthalmia Neonatorum ... ..	...	1	1	...	...	...	10
Diarrhoea ... ..	...	3	...	1	2	...	39
TOTAL	1	34	21	6	8	...	650

Welfare of the Blind—Section 2 of the Blind Persons Act, 1920 imposes upon County and County Borough Councils the duty of making provision, satisfactory to the Minister of Health, for the welfare of blind persons normally resident in their area. This duty is discharged in Blackburn by the Blind Persons Act Committee which provides for the domiciliary assistance of necessitous unemployable blind persons and for the employment of suitable blind persons either in the Workshops for the Blind (which are administered by the Committee), or as home workers. The Education Committee accepts financial responsibility for the training of blind trainees who become blind before the age of 21 whilst the Ministry of Labour are responsible for the training of those who become blind at or after that age.

The Corporation's scheme provides, through the Blackburn and Darwen Society for Visiting and Instructing the Blind for the appointment of Home Teachers. The Society employs four home teachers, two of whom work in the County Administrative area and two in the Borough. In respect of the Borough service, the Blind Society receive an annual grant of £96 from the Corporation plus the salaries of two home teachers. The duties of the Home Teachers include home visitation, instruction of the blind in Braille and Moon, enquiries in connection with the domiciliary assistance scheme and general welfare work.

The Corporation's domiciliary assistance scheme for unemployable blind persons provides for the income of a single person to be made up to £2 11 0 per week and for that of a married couple to £3 14 6 per week : where the married couple are both blind the amount is £3 18 0. Allowances are also made for any dependants.

Annual grants are made by the Corporation to the Northern Counties Association for the Blind, the National Library for the Blind, the Manchester and Salford Blind Aid Society and the National Institute for the Blind.

The Joint Finance Committee for the Blind of Blackburn and District, which is composed of representatives of the County Council, the County Borough, the Borough of Darwen, the Blackburn and Darwen Visiting Society and other ladies and gentlemen, is a voluntary Committee and undertakes the organisation of all voluntary efforts and collections, on behalf of the Blind. For this purpose a paid Organising-Collector is employed.

In the financial year ended 31st March, 1947, the Blind Persons Scheme cost the Corporation £7007 allotted as under :—

	£
Home Teachers salaries, etc....	634
Visiting Society	96
Other Blind Agencies ...	350
Grants to unemployable necessitous persons	6190
Adaptation—15 Victoria Street	127
Maintenance—Blind Epileptic	80
Sundry expenses	2
	<hr/>
	£7479
Less Workshops for the Blind surplus...	472
	<hr/>
	£7007
	<hr/>

APPENDIX I.

Report submitted by the Medical Officer of Health to the Chairman and Members of the Health Committee on the 7th May, 1948.

Mr. Chairman, Ladies and Gentlemen,

National Health Service Act, 1946.

As the "appointed day" will soon be upon us the time appears opportune to consider the changes which will then take place.

The National Health Service Act involves a new form of hospital administration, it imposes new duties on Local Health Authorities and empowers them to extend their services in various directions, it provides for the establishment of general medical and ancillary services, and also authorises the Minister to make arrangements in connection with research, the bacteriological service, blood transfusion and other services. These changes will, in their turn, indirectly affect many phases of public health administration.

For the latter reason the appended notes are more than a factual review. If they are speculative, and possibly critical, they are voiced constructively and with the desire to assist you in advancing the local health services.

1. HOSPITALS AND INFECTIOUS DISEASES CONTROL.

As regards the local hospitals. Those responsible for their development may well feel pride in handing them over and be fully confident that they will play an important part within the Manchester Region. The organisation of these hospitals, of their specialist staff and departments, are much in advance of the set-up found in the majority of non-university centres. Parochialism no longer plays a part in the local administration; the Blackburn hospitals are closely¹ associated and, as a result of a pooling of their resources, function efficiently and economically.

This spirit of co-operation applies not only to the Blackburn hospital and specialist services but now extends to the Accrington Victoria Hospital which uses our orthopaedic surgeon and one of our gynaecologists. This hospital was also interested in the proposal of the Joint Hospitals Advisory Committee to appoint a full-time paediatrician, a proposal which is discussed in a later section of these notes.

The Regional Board will find in Hospital District No. 5, (described by the Surveyors of the North Western Region in their 1945 Report) which comprises a population of 259,477, a unified service complete, with the exception of paediatrics, as regards the ordinary specialties.

As the population served could not sustain such hyperspecialist services as neuro-surgery and plastic surgery these, and certain other refinements, will require to be provided at regional, or even higher, level.

Although the present set-up has been conceived on sound lines it presents certain short-comings, one of which, common to all areas, is the universal nursing shortage.

(a) **Queen's Park Hospital.**

The Public Assistance Committee are fully alive to the structural shortcomings at Queen's Park Hospital and have urged the provision of lifts, of a new operating suite and modern X-ray apparatus, additional accommodation for the nursing staff, and kitchen extensions. It is expected that an order will shortly be placed for a new X-ray apparatus although the remainder of the Committee's proposals have been held up through no lack of energy on their part.

(b) **Blackburn and East Lancashire Royal Infirmary.**

Plans for the Royal Infirmary include new out-patient and venereal diseases departments and extensions to in-patient accommodation. These desirable schemes, have, like the Queen's Park projects, not materialised through circumstances outside local control.

(c) **Corporation Hospital for Infectious Diseases.**

Park Lee Hospital, opened 50 years ago, provides 124 beds, thirty of which, earmarked for tuberculosis, form part of the County Council bed pool. The dearth of nurses, particularly for the past three or four years, has enforced a hand to mouth existence as regards infectious accommodation and, from time to time, the use of beds belonging to other authorities. I am grateful to my neighbouring colleagues for their ready co-operation and have been happy to "help out" certain of them when they have lacked accommodation for their own cases-

Due to a happily low incidence of infectious disease and shortage of nursing staff three of the large wards are empty more often than not, although frequently they might well be used for the treatment of selected cases of such so called "minor" infections as measles and whooping cough or even for other purposes, including the treatment of tonsils and adenoids. The latter proposal if put into effect, would supplement the "T and A" bed resources at Queen's Park and the Royal, thereby reducing the swollen waiting list of school children awaiting operation. It is held up, like many other projects, by

ERRATUM.

PAGE 115, LINE 16

For "IN A SMALL WARD"

Read "IN THE SAME WARD"

dearth of nursing staff. Despite the low occupancy vital overhead charges due to repairs, heating and lighting, upkeep of the grounds etc., go on at Park Lee with resultant heavy patient day costs. Conditions at isolation and general hospitals differ vastly, a fact which should be borne in mind when considering the relatively high cost per case treated at Park Lee. In general hospitals a wide range of non-infectious conditions may be treated side by side in a large ward both without risk to other patients and without the time-absorbing and scrupulous technique required in isolation hospitals to prevent cross infection.

The various types of infectious disease require segregation the one from the other. This is difficult in hospitals with limited cubicle accommodation where two or even more open wards, each appropriately staffed, may from time to time be required for a dozen cases which, had they been straight forward "surgicals" or "medicals," could be treated in a small ward, at the same time, by the same staff, and with proportionate economy of money and nursing personnel—the latter, these days, in short and dwindling supply. For these reasons the number of infectious beds empty is no criterion of those available nor, particularly in times of low infectious disease incidence, does a high "patient day" cost imply prodigality. Though Park Lee is old, as hospitals go, the ward lay-out has lent itself to structural improvement and, as a result of the reconstruction scheme (held up since 1939) started some eighteen years ago, four wards have been reconditioned and additional cubicles provided. Hostilities prevented completion of a programme which included improved Home accommodation, laundry reconstruction and the provision of a 20 or 30 bedded cell-block.

The latter proposal is essential and would go far towards neutralising the nursing shortage whilst enabling a larger variety and number of cases to be nursed at one and the same time than is now possible. For this reason one hopes that the matter will be given urgent priority by the Board if they decide that the hospital is to follow its present use.

(d) **Control of Infectious Diseases.**

Before leaving the subject of the isolation hospital the effect of its impending transfer upon infectious disease administration should be mentioned.

It is the duty of every Medical Officer of Health to control the spread of infectious disease within his area. One method at his disposal is that of isolation. In Blackburn, as in many other towns, the Medical

Officer of Health is Medical Superintendent of the infectious diseases hospital and, by a system of selective admissions, by balancing intake and outflow, is enabled to use the beds at his disposal to best advantage.

After July 4th the Medical Officer of Health may no longer be in a position to regulate admissions. I am not alone in voicing a fear (which in fact is shared by all my colleagues) that such a curtailment of his duties will render his epidemiological work, never easy, much more difficult.

He will, however, continue to receive infectious disease notifications and still be responsible for organising the requisite preventive measures. These depend for their effective functioning upon a team—comprising isolation hospital, bacteriological investigation, follow-up of contacts, etc.—of which he is the head. The components of this team are complementary the one to the other and can function only when controlled by one who has an overall view of the game, namely the Medical Officer of Health. I wrote almost four years ago that “..... the body which is to take over the isolation hospitals should with them assume responsibility for epidemiological control.....” Time has not altered that view and I still regard it as essential that the Medical Officer of Health should remain actively and executively associated with the local isolation hospital.

Some formula should be devised to this end.

- (e) **Finnington Smallpox Hospital**, like the majority of its kind, was not designed for its present purpose and, whilst as well-maintained as its lay-out permits, must be regarded as a makeshift. As the hospital is so rarely used (it has been opened on only four or five occasions during the last 25 years) a large outlay on structural improvements cannot be justified. Finnington, though not “disclaimed” by the Minister, may, in time, become redundant, alternative accommodation being provided in one or other ways, perhaps in institutions remote from large aggregations of population and specifically set aside for smallpox, or in a self-contained, yet separate, unit of some hospital receiving at the same time other diseases.
- (f) **Springfield Municipal Maternity Home** provides twenty beds in private or semiprivate wards at charges more reasonable than those of private maternity homes. The bulk of cases admitted are normal and under the care of private practitioners. No hard and fast conditions have hitherto governed the mode of admission to Springfield, the number of beds being generally sufficient to meet the requirements of all seeking admission.

- (g) **Future Hospital Development** will be determined by the Regional Hospital Board ; in this connection I would draw your attention to the recommendations of the Hospital Surveyors in 1945.

They expressed the opinion that as the site of the Royal Infirmary is too restricted to permit ambitious extensions, and the Queen's Park Hospital buildings do not come up to first class standard, the long-term policy must include the erection of a new hospital in which, perhaps, additional infectious disease accommodation might be incorporated.

The Surveyors regarded as an essential priority a new maternity block to replace Queen's Park maternity unit and Springfield and at the same time to provide increased accommodation.

Improvements at Queen's Park, previously agreed by the Public Assistance Committee as essential, and an early increase of cubicle accommodation at Park Lee were also recommended, the latter as a matter of urgency. One hopes that the Regional Board will have less difficulty in carrying out improvements on these lines than has the Local Authority.

- (h) **Integration of Preventive and Hospital Services.**

In concluding my comments on the hospital services I would refer, objectively, to the effects which any separation of the hospital and preventive services may have upon public health administration. Hitherto the Medical Officer of Health, through his contact with the hospitals of his Authority, has been able to expand the clinical activities of his department by integrating them with local hospital administration. In this respect he has been particularly fortunate when actively associated with any Joint Committee representing voluntary and authority-owned hospitals. What is the future position ?

Medical Officers of Health of Local Health Authorities in the Manchester Region have been invited to join a liason committee, which will maintain contact with officials of the Board. This association will establish a link between the Local Health Authority through its chief medical adviser, and the Board, and thereby facilitate the frank airing of views. It will not, however, give the Medical Officer a " three-tier " contact down the scale Regional Board—Hospital Management Committee—Local Health Authority. In the interests of sound local government I regard such contact as essential.

Whilst there is no rule which bars Medical Officers of Health from Local Hospital Management Committees, at the time of writing this

report the composition of these Committees has not been published ; consequently I do not know how many Medical Officers, if any, have been appointed.

I would suggest that such Medical Officers as be not appointed to Management Committees be invited to attend as observers, though not necessarily silent ones, meetings of the Management Committee. A gesture of this nature would certainly facilitate public health administration and I can but feel that the knowledge which the average medical officer possesses of his own and contiguous areas would be of some help to the Committee.

However the liason be established matters little, provided that it is close, active and not one of mere lip-service. Unless the curative and preventive sides of health work are closely associated both will suffer and neither will deliver " first class goods." One need go no further than Blackburn to establish the truth of this statement.

The benefits which have accrued to the voluntary and municipal hospitals, to the general health service and, most important of all, to those in need of hospital or specialist treatment, since the Joint Hospitals Advisory Committee became an active entity, bear ample testimony to the value of a close association between those concerned with the curative and preventive aspects of medicine.

2. SERVICES TO BE PROVIDED BY LOCAL HEALTH AUTHORITIES.

So much for the services which, with their present personnel, are to be transferred to the Board. What are the new obligations of Local Health Authorities ?

(a) Health Centres.

Section 21 requires them to provide and equip Health Centres for the purposes, inter alia, of general medical and dental services. No specific instructions as to lay-out have been received, apart from a Circular which states that the ".....building situation makes it impossible to undertake, for some time to come, any general programme for their provision. The alternative, of conversion of existing buildings, is not only restricted by lack of available and suitable accommodation in the right places but—more important—involves a real risk that second-rate production may prejudice the attractiveness of the whole Health Centre conception. Health Centre development is essentially something which, if it is to be done at all, must be done well. It is imperative that it should not be badly started."

The Circular does not entirely rule out conversion which may prove " to be both practicable and attractive....."

Light hearted conversions in the past are the cause of some of the difficulties which beset many of our present-day activities and for that reason, one welcomes the warning note of the Circular from which I have quoted.

(b) Care of Mother and Child.

Section 22 requires Authorities to make full provision for the care of mothers and young children ; included in these requirements is that of medical and dental care of expectant and nursing mothers and for children covered by the child health scheme. Comprehensive arrangements to this end were in force long before the National Health Service Act was placed on the statute book, and, since our proposals for the purposes of Section 22 were submitted, the service has been strengthened by the appointment of an additional obstetrician/gynaecologist (E. Gledhill, Esq., M.D., F.R.C.S., M.R.C.O.G.).

(i) Day Nurseries.

It is proposed to provide four additional day nurseries and a fifth nursery in lieu of the St. Alban's Place premises if, and when, they are released for educational purposes. This provision will make a total of seven Corporation owned nurseries, which will call for additional administrative personnel (over and above the staff to be employed in the new nurseries) and residential accommodation for some of the nursery staff.

The immediate supervision of seven nurseries with accommodation for nearly 400 children, of a staff of approximately 75 nurses and nursing assistants and 30 domestics, will be an exacting task and will require the appointment of a full-time Supervisory Matron and, probably, of an additional junior clerk. Many of the nursing staff at St. Alban's Place Day Nursery live at some distance from Blackburn and reside at the Nursery. When these premises cease their present use residential accommodation will be required for the St. Alban's Place staff and also probably for some of the staff recruited for the new nurseries.

There is a long waiting list of children for admission to the present nurseries and I doubt whether the increased provision proposed will meet demands. For this reason the establishment of suitable nursery accommodation in connection with industrial concerns should, subject to adequate oversight by the Health Department, be encouraged and the Cotton Employers Association have been approached to this end. At the time of

writing this report the Ministry of Health have approved proposals for a 41-place nursery at the Lancashire Cotton Corporation's Imperial Mill and for a 30-place nursery at the Pioneer Mill. I hope that the example of these two concerns will be followed by other undertakings in the Borough.

(ii) Child Health Specialist.

A weakness in the Council's Child Health Scheme is that no paediatrician is readily available.

The constituents of the Joint Hospitals Advisory Committee are alive to this deficiency and, after a survey by two assessors appointed by the British Paediatric Association, accepted the principle of a full-time appointment. It is, however, extremely unlikely that anything will be done before the appointed day. After that date the Regional Board will be asked to provide paediatric advice as required in Blackburn.

(iii) Consultant Physician.

In the Annual Report for 1946 I referred to the fortnightly clinic at which Dr. McAdam examines expectant mothers referred for non-obstetric abnormality. So valuable has been this clinic that it is to be continued after the appointed day either by the physician at present in charge or under alternative arrangements to be made by the Regional Board.

(c) Domiciliary Midwifery Service.

Section 23 of the Act concentrates responsibility for the supervision and adequate supply of midwives, in the hands of the Local Health Authority. Since the passing of the Midwives Act, 1936, the District Nursing Association have acted as the Council's Agents for the purposes of municipal midwifery. Satisfactory transport facilities exist for the conveyance of midwives and gas-air analgesia apparatus (of which growing use is made) and as the present scheme works well it is proposed that it shall continue.

Reference should here be made to the shortage of accommodation at the District Nurses' Home which, in every other respect, is an admirable place. For this reason the Executive Council of the District Nursing Association rightly consider that the headquarters of the District Midwifery Service should be elsewhere than at St. Peter Street and have sought alternative premises in vain. This question, and that of some deployment of the midwifery service, is one which will require attention.

Before the housing sites, proposed or in process of erection, are nearing completion it will be necessary to consider how the domiciliary midwifery service (with the exception of a nucleus based on headquarters and which will serve the central districts of the town) may be distributed to cover the outlying districts. When the Health Centres take shape residential accommodation might be provided in them for one or more midwives.

Alternatively, or until the Health Centres are in being, the Health and Housing Committees might arrange for accommodation on the new housing estates to be allotted to the Municipal Midwifery Service.

In the absence of an available house or hostel facilities the district midwife must, perforce, seek lodgings. This arrangement is inconvenient both to the midwife and, due to her erratic hours, to the householder also.

Midwives are in such short supply that they are in a position to choose their employers rather than vice-versa. For this reason a district midwife will apply for a post under an authority which provides a house rather than for one in an area where no such amenity is offered. Various authorities, I understand, now make this provision.

(d) Health Visitors.

Section 24 of the Act introduces no novelty and merely extends the existing duties of a health visitor to include the giving of advice as to the care of persons suffering from illness.

(e) Home Nursing Service.

Section 25 of the Act imposes upon Authorities a new duty, namely that of providing a home nursing service. Such a service is at present efficiently administered by the District Nursing Association and it is proposed that the Association shall act as agents of the Authority from the appointed day.

(f) Immunisation and Vaccination.

Section 26 repeals the Vaccination Acts, 1867 to 1907, and requires Authorities to make arrangements with general practitioners for the performance of diphtheria immunisation and of vaccination. Based on the Registrar General's estimate of population 51.53 per cent (52.25 per cent in 1946) of those under 5 years and 99.2 per cent (92.3 per cent in 1946) of Blackburn children aged 5—14 years had received diphtheria prophylactic treatment by the end of 1947; thus the position as regards diphtheria immunisation is satisfactory particularly so in the 5—14 age group.

I feel, however, that the percentages for 1947 are open to query, that for the under 5 age group being a little on the low side and that for the elder group being unduly optimistic. The error for the former group may be due to some slight overestimate of population. That for the latter age group may be due to the reverse, plus the fact that the parents of certain children, previously immunised in infancy, may have consented to immunisation in school without disclosing previous treatment. Such children would then be entered as "Primary Immunisations" and not as "Reinforcements," thereby throwing the figure out of gear.

Whatever the cause I feel that the figure for this group is unreliable and that one between 93—95 per cent would be nearer the mark. The proportion of children under five years (amongst whom diphtheria is most prevalent and severe) remains somewhat low despite the effort which is concentrated upon them.

I consider that a higher immunity rate could be reached were the health visitors to do the injections during the course of their routine visits. This proposal was put up to the Ministry of Health but did not find favour.

The vaccination situation is less satisfactory than is that of diphtheria immunisation though Blackburn, with more than 50 per cent of the community unvaccinated, is better placed than some areas where the conscientious objection rate is as high as 90 per cent. I do not think, however, that the repeal of the Vaccination Acts will favour the spread of small-pox and am confident that parents and others will avail themselves of vaccination should the risk of the disease arise.

(g) Ambulance Service.

Section 27 requires Local Health Authorities to provide ambulances and other transport facilities for the conveyance of the sick. The Council already provides eight ambulances, four through the Central Garage Sub-Committee and two each through the Health and Public Assistance Committees. Our proposals provide for the administration of this service by the Health Department in association with the Fire Service now that the latter have become the responsibility of the Council.

(h) Prevention of Illness, Care and After-Care.

Section 28 empowers Local Health Authorities with the approval of the Minister to make arrangements for the prevention of illness and for care and after-care and requires them to so provide to such extent as the Minister may direct.

The only direction so far issued applies to tuberculosis. This will little affect the present administration.

In their implementation of Section 28 the Local Health Authority propose that arrangements be made for the follow-up where necessary of hospital-discharge cases, for intensified health and dental propaganda, and for the loan of nursing equipment for use in the home. Wide powers are conferred by Section 28; in fact the only "care and after-care" provision which appears to be excluded is cash payment unless by way of wages paid to persons engaged in suitable occupations provided by the Authority with Ministerial approval.

(i) **Care of the Aged Sick.**

Here, then, is an opportunity to make wider provision for the prevention of sickness and for rehabilitation than has hitherto been possible. In this connection the problem of the aged sick immediately springs to mind. This already acute problem will, owing to weighting of the older end of the age-group scale, become increasingly so. It is estimated, that, by 1971, there will be living in Great Britain 9,756,000 old people (i.e. men over 65 and women over 60 years) compared with a figure 5,571,000 in 1941.

Prior to the discovery and increasing use of penicillin and the "sulpha" drugs the respiratory diseases took heavier toll of the aged than is now the case. For this reason it is probable that, if surgical emergencies and accidents be excluded, the aged sick group will contain in the future a larger proportion of cardiac, cardio-vascular, rheumatic, psychiatric and other long-term disabilities than hitherto.

Those engaged in municipal hospital administration are gravely concerned by the heavy calls which the aged (many of whom become hospital in-patients in the first instance, not so much by reason of great disability, but owing to lack of arrangements for their home-care) make upon in-patient accommodation. After hospital rehabilitation and discharge home many of the aged break down due, again, to the very reason which first led to their admission, and are re-admitted. Thus they rotate round a vicious circle until re-admitted, permanently bed-ridden, for the last time.

How best can the resources of the National Health Service Act be integrated to cope with this problem?

The Act provides for a complete hospital service, the term "hospital" including institutions for medical rehabilitation or convalescent treatment, and out-patient departments.

It imposes upon Executive Councils the duty of providing a personal

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medical service for all, upon Local Health Authorities that of providing a home nursing service and at the same time enables them to provide domestic help and nursing equipment in cases of sickness and to make arrangements for the prevention of illness and for the care and after-care of the physically and mentally sick.

It is easy to visualise how these services, linked up by an experienced social worker associated closely with the Local Executive Council, the Local Hospital Management Committee, the Local Health Authority and the hospital almoner, may be dispensed to benefit the aged sick whilst reducing the calls upon in-patient accommodation.

This matter is one which certainly merits and will, I am sure, receive the earnest attention of progressive health authorities in carrying out the spirit which underlies Section 28 of the Act.

(j) **Domestic Help.**

Section 29, which deals with the provision of domestic help in households afflicted with sickness, calls for little comment. This scheme already operates in Blackburn and is to continue with extensions.

(k) **Mental Health Service.**

Section 51 imposes new duties on Local Health Authorities in regard to persons coming within the scope of the Lunacy, Mental Treatment and Mental Deficiency Acts. To this end the Council have set up a Mental Services Sub-Committee and also an After-Care Committee. The service is to be administered by the Medical Officer of Health who will have on his staff two ex-relieving officers to be designated " authorised officers " who will operate under the direct supervision of a Superintendent Social Worker to be jointly appointed by Burnley and ourselves, and who will work in the areas of both authorities. It is essential that whoever be appointed to the latter post be experienced not only in mental ailments but also in social welfare generally as much of his, or her work will be concerned with the domestic and personal problems which confront the near relatives of the mentally afflicted.

At a later date it may well prove advisable to proceed, independently of Burnley, with a full-time appointment of a Social Worker both for the purposes of mental disability and also to act as co-ordinating officer of the " care and after-care " arrangements as described in paras. (h) and (i) above.

The existing occupation centre in Alma Street is to be taken over for the training of suitable cases of mental defectives.

It is estimated that the services of a psychiatric social worker will be required for two sessions per month and application is to be made to the Regional Board for one of the Boards psychiatrists to be made available as required. It is anticipated that the Board's Mental Specialists will be available to advise locally in cases presenting doubt or difficulty.

Application is to be made to the Lancashire County Education Authority for the occasional services, where necessary, of the Medical Officer of their Blackburn Child Guidance Clinic who is a specialist in mental deficiency and already co-operates with the Blackburn Education Authority in the care of educationally sub-normal or maladjusted children of school age.

The work of the mental health service will be closely co-ordinated with the Nerve Clinic at present held once weekly at the Royal Infirmary.

Although this service is new to us I do not anticipate undue difficulties. Your Medical Officers are conversant with mental deficiency ascertainment and diagnosis and are competent to deal with the day to day aspects of this subject. They have had no recent experience in Lunacy; this subject, quantitatively, will not present a serious problem and should be easily integrated into the general work of the Department.

CONCLUSION.

In concluding the foregoing comments on the National Health Service Act I should say that, in framing proposals under Part III of the Act for submission to the Ministry, I was gratified to note how complete the Blackburn services are. No radical extensions or amendments were required to bring your welfare arrangements, your diphtheria immunisation schemes, or the domiciliary midwifery services, into line with the comprehensive set-up laid down in Circular 118 of the Ministry of Health. This I regard as proof of the progressive policy which has been followed in Blackburn.

I have the honour to be,

Mr. Chairman, Ladies and Gentlemen,

Your Obedient Servant,

V. T. THIERENS,
Medical Officer of Health.

APPENDIX II.

COUNTY BOROUGH OF BLACKBURN

National Health Service Act, 1946

Section 22

Proposals for Arrangements for the Care of Mothers and Young Children as approved by the Minister of Health on the 12th day of May, 1948.

PART I

GENERAL STATISTICAL DATA.

1.	Total mid-1946 population of the Borough	.. ..	107,300
2.	Total mid-1946 number of children under 5 years in the Borough	.. ..	7,390
3.	Number of registered live births in the Borough (Residents):		
(a)	1945, legitimate:	1,367	
	illegitimate:	111	1,478
(b)	1946, legitimate:	1,678	
	illegitimate:	116	1,794

EXISTING SERVICES.

GENERAL OUTLINE.

ADMINISTRATIVE ARRANGEMENTS.

The services are administered by the Medical Officer of Health from the Public Health Office. The equivalent of two and two-elevenths full-time medical officers are employed on this service.

The services of a Consultant Obstetrician and Gynaecologist are shared with the Lancashire County Council, Borough of Darwen, Queen's Park (Poor Law) Hospital, and Blackburn and East Lancashire Royal Infirmary. He conducts one Consultant Ante-natal Clinic per fortnight at the Health Department and is available for domiciliary consultation with general practitioners. He also conducts one Ante-Natal Clinic per week at Queen's Park Hospital. The services of an additional full-time obstetrician-gynaecologist are needed in the Blackburn Hospital District, and following the decision to make such an additional appointment, applications have recently been invited by advertisement in Medical Journals. The services of a Consultant Physician are available for ante-natal cases.

The services of a Child Health Specialist are essential. It is possible that, through the Joint Hospitals Advisory Committee, a full-time paediatrician may be appointed before the appointed day.

CONSULTANT ANTE-NATAL CLINICS.

In addition to the routine Ante-Natal Clinics, the Consultant Obstetrician conducts one Ante-Natal Clinic per week at Queen's Park Hospital and one per fortnight at the Health Department.

A special clinic conducted by a Consultant Physician is held at the Health Department once a fortnight, at which are seen cases suspected to be suffering from conditions, particularly cardiac abnormalities, which might complicate pregnancy, referred from the Ante-Natal Clinics.

CONSULTANT POST-NATAL CLINICS.

In addition to the routine Post-Natal Clinics the Consultant Obstetrician conducts one Post-Natal Clinic per week at Queen's Park Hospital, and, where necessary, sees post-natal cases referred to his fortnightly Ante-Natal Clinics.

SPECIAL VENEREAL DISEASES CLINICS.

In connection with the Ante-Natal Scheme two sessions per week at the Health Department are devoted to the treatment of expectant mothers suffering from venereal diseases. Other women whom there is reason to believe have been "innocently infected" and children are also treated at these clinics. The clinic is attended by a Lady Assistant Medical Officer for Maternity and Child Welfare and by two Health Visitors.

CARE OF UNMARRIED MOTHERS AND THEIR CHILDREN.

The Diocesan Moral Welfare Council co-operate with the Local Health Authority in this work. The Diocesan Council maintain a home of 25 places for unmarried mothers and their children at "The Grange," Wilpshire, and also a shelter which receives, inter alia, expectant mothers, at 133, Preston New Road. They also supervise unmarried mothers in their own homes. The Town Council make an annual grant to the Diocesan Council in consideration of these services.

The Queen's Hall Methodist Mission, through its Sisters and other workers, also engage, though to a lesser extent than the Moral Welfare Council, in rescue work and in dealing with this class of case.

The arrangements include, inter alia, (a) reference, where necessary, of expectant mothers of illegitimate children to a suitable institution for pre-natal and lying-in care, (b) post-natal follow-up of such cases by voluntary organisation workers in co-operation with the Health Visiting Staff, and (c) the placing of illegitimate children where the mothers find difficulty in so doing.

DENTAL CARE.

The Health Committee already have an arrangement with the Education Committee for joint user of the resources of the School Dental Service.

Although, except at the Day Nurseries, there is no routine dental inspection, such inspection is offered to all expectant mothers attending the Ante-Natal Clinics, and dental treatment, including conservative treatment, is available for them and for nursing mothers and children under five who are referred from the Clinics and Child Welfare Centres. Dentures are supplied, when required, at a reduced cost or free in necessitous cases. A dental surgeon visits the Day Nurseries periodically to inspect the children's teeth, and treatment is given at the dental clinic where necessary. Theoretically the arrangements for the dental care of expectant mothers are adequate.

In practice they are unsatisfactory because many of the mothers attending the Ante-Natal Clinics fail to take advantage of the facilities offered them.

CARE OF PREMATURE INFANTS.

Prematures born in hospital are there retained until their physical condition is such that the mothers, with the assistance of the Health Visitors and equipment (as mentioned in the following paragraph) supplied by the Health Department might reasonably be expected to rear the children at home. Prematures born at home are cared for by the medical practitioner in attendance or who may be called in under the Midwives Act. Where necessary, such children are removed to hospital.

In the case of all children, whether born in hospital or at home, electric blankets, hot water bottles, additional clothing, etc., are supplied by the Health Department as required.

SUPPLY OF WELFARE FOODS.

Dried milk, malt and oil, virol, concentrated vitamins and other welfare foods are purchased in bulk and sold to mothers at the Child Welfare Clinics at cost price, or, in necessitous cases, at reduced price or free in accordance with a scale prepared by the Council.

By arrangements with the Ministry of Food, other Welfare Foods are supplied at the Centres either free or on production of coupons or permits.

PROVISION OF MATERNITY OUTFITS.

Maternity outfits are purchased in bulk and are available at the Health Office at cost price. In necessitous cases the price is reduced or waived.

A. ANTE-NATAL CLINICS.

(i) Number of clinic premises	..	..	..	..	4
(ii) Number of expectant mothers who attended in 1946					2,019
(iii) Number of sessions held weekly	..	..	..		7

B. POST - NATAL CLINICS.

(i) Number of Clinics	..	..	..	..	3
(ii) Number of sessions held	..	..	..		9 per four wks

C. IF ARRANGEMENTS ARE MADE WITH GENERAL PRACTITIONERS.

No arrangements are made by the Local Authority with general practitioners for Ante-Natal or Post-Natal care.

D. CHILD WELFARE CLINICS.

(i) Number of Clinics	..	..	..	..	8
(ii) Number of sessions held	..	..	..		21 per fortnight

E. DAY NURSERIES.

(i) Number	..	..	..	..	3
(ii) Number of places for children	..	..	..		143

F. RESIDENTIAL NURSERIES PROVIDED UNDER MATERNITY AND CHILD WELFARE POWERS.

None.

G. MOTHER AND BABY HOMES.

See note above under "General outline - Care of Unmarried Mothers and their Children."

H. DENTAL TREATMENT GIVEN IN 1946.

(i) To expectant or nursing mothers	..	..	147
(ii) To children under 5	..	..	51

Radiographs were available where necessary. Mothers received conservative treatment in 39 cases and children in 4 cases. Dentures were supplied in 20 cases.

PART II

DESCRIPTION OF THE SERVICE WHICH IT IS PROPOSED TO OPERATE ON THE APPOINTED DAY

A. GENERAL ARRANGEMENTS.

1. *Administrative Arrangements.*

The services will be administered by the Medical Officer of Health from the Public Health Office with the assistance of the equivalent of two and half full-time medical officers.

2. *Joint Arrangements with other Local Health Authorities.*

None.

3. *Liaison with other bodies.*

The Authority will co-ordinate its arrangements for the care of mothers and young children with the hospital and specialist services provided by the Regional Hospital Board through the personal liaison of the Authority's Medical Officers with the personnel of the hospital and specialist services and by the interchange of the relevant records.

B. PARTICULAR ARRANGEMENTS WHICH IT IS PROPOSED TO OPERATE ON THE APPOINTED DAY.

1. *Clinics.*

(a) Number of Ante-Natal Clinics	..	4
Number of Ante-Natal Sessions	..	*19 per fortnight
(b) Number of Post-Natal Clinics	..	3
Number of Post-Natal Sessions	..	‡9 per four weeks
(c) Number of Infant Welfare Centres	..	10
Number of Infant Welfare Sessions	..	25 per fortnight

*Including 4 per fortnight to be conducted by the Consultant Obstetrician.

‡Including 4 per four weeks to be conducted by the Consultant Obstetrician.

In addition to the above, one clinic per week will be held by a Physician Specialist (by arrangement either with the Regional Hospital Board or direct with the Specialist) at which will be seen cases suspected to be suffering from conditions, particularly cardiac abnormalities, which might complicate pregnancy.

2. *Care of Premature Infants.*

Premature babies born in hospital will, subject to the agreement of the Regional Hospital Board, be retained until their physical condition is such that the mothers, with the assistance of the Health Visitors and equipment (as mentioned in the following paragraph) supplied by the Health Department, might reasonably be expected to rear the children at home. Prematures born at home will be cared for by the Medical Practitioner in attendance, or who may be called in under the Midwives Act, and the services of a paediatrician will be available where necessary. Where necessary, such children will be removed to hospital under arrangements to be agreed with the Regional Hospital Board.

In the case of all children, whether born in hospital or at home, electric blankets, hot water bottles, additional clothing, etc., will be supplied by the Health Department as required and the other special arrangements suggested in Ministry of Health Circular 20/44 made in conjunction with the Regional Hospital Board.

In suitable cases, the services of a Domestic Help will be provided.

3. *Dental Care.*

(i) *Provision for Dental Treatment of:*

(a) *Expectant Mothers.*

All expectant mothers attending ante-natal clinics, and those under the care of general practitioners, if they so desire, will be referred for dental examination and given any necessary treatment, including conservative treatment, at the School Dental Clinic.

Nursing Mothers.

All nursing mothers attending post-natal clinics, and those under the care of general practitioners, if they so desire, will be referred for dental examination and given any necessary treatment, including conservative treatment, at the School Dental Clinic.

(b) *Young Children.*

A Dental Surgeon will visit each Day Nursery periodically to examine the children's teeth. Children requiring treatment will be treated at the School Dental Clinic. All pre-school children on attaining the age of $2\frac{1}{2}$ years and periodically thereafter will be invited to attend the School Dental Clinic for inspection. Treatment (including conservative treatment) will be given when necessary.

(ii) *Dentists to be employed.*

(a) Full-time Dentists	..	..	None.
(b) Part-time Dentists	..	..	Equivalent of $\frac{1}{3}$ dentist.

(iii) *Number of Sessions to be held each week.*

Four.

(iv) *Arrangements for supply of dentures.*

All forms of dental treatment, including dentures, where necessary, will be provided by the Authority's dental officers. All dentures will be made in the Authority's own dental workshop, or by mechanics to the profession, or if the dental officer concerned is a part-time officer of the Authority, by any mechanic employed by him in his private practice.

4. *Supply of Welfare Foods.*

Dried milk, malt and oil, virol, concentrated vitamins and other welfare foods will be purchased in bulk and supplied to expectant or nursing mothers or young children where their welfare so requires. By arrangement with the Ministry of Food, welfare foods included in the Government's Welfare Food Scheme will be supplied at the Centres.

5. *Provision of Maternity Outfits.*

Maternity outfits will be purchased in bulk and will be available at the Health Office for all domiciliary cases.

6. *Nursery Provision.*(a) *Day Nurseries.*

Three Day Nurseries with an aggregate of 148 places will be provided in different parts of the town. These will be supervised by one of the Health Visitors and an Assistant Medical Officer for Maternity and Child Welfare will visit regularly and examine each child at least once each month. A proportion of the children attending two of the nurseries will be conveyed between their homes and the nursery each day by transport provided by the Council.

(b) *Residential Nurseries.*

None.

(c) *Other forms of provision for the care of children.*

A register will be kept of approved daily guardians who undertake in return for a small payment by the Authority to accept supervision by the Authority in connection with any child with whose parents the guardian enters into arrangements for its care during the day time

7. *Care of Unmarried Mothers and their Children.*

Arrangements will be made with the Blackburn Diocesan Moral Welfare Council for the (a) admission of suitable unmarried mothers and their children to Hostels, and (b) the supervision and welfare of unmarried mothers and their children both in Hostels and in their own homes.

8. *Services of Consultants.*

It is proposed before the appointed day to ascertain from the Regional Hospital Board which of the following consultant clinics will be taken over and provided by the Board from the appointed day. The Local Health Authority propose to continue to provide such of these clinics as are not taken over by the Board and to provide such additional similar clinics as may be found necessary.

- (a) Consultant Obstetricians to conduct Ante-Natal and Post-Natal Clinics, and, if necessary, to be available for domiciliary consultations.
- (b) Consultant Physician to conduct Ante-Natal Clinics and, if necessary, to be available for domiciliary consultations.
- (c) Child Health Specialist to conduct Clinics and, if necessary, to be available for domiciliary consultations.
- (d) Consultant Ophthalmologist to conduct sessions.
- (e) Consultant Aurist to conduct sessions.
- (f) Orthopaedic Consultant to conduct sessions.

9. *Special Venereal Diseases Clinic.*

In connection with the Ante-Natal Scheme, it is proposed to consult with the Regional Hospital Board with a view to two sessions per week being devoted to the treatment of expectant mothers, nursing mothers and young children suffering from venereal diseases.

These sessions will be in addition to those included in paragraph B.1.

The adequacy of the whole service will be reviewed from time to time and such expansion of the service and increases in staff made as may be needed and as permitted by trained personnel available.

PART III

DEVELOPMENT PLAN

DEFICIENCIES.

Medical Officers.

At the present time the authority's Medical Officers do not specialise.

Day Nurseries.

The present Day Nursery accommodation is not sufficient to meet demands.

PROPOSALS.

Medical Officers.

Medical Officers employed by the Authority will be encouraged to concentrate on either Maternity or Child Welfare Work.

Day Nurseries.

One of the existing Day Nurseries (72 places) will be closed, and three new nurseries (each of 40 places) will be provided in various parts of the town. An order has already been provisionally placed through the Ministry of Works, for prefabricated buildings for this purpose.

COUNTY BOROUGH OF BLACKBURN

National Health Service Act, 1946,

Section 23

**Proposals for the Provision of a Midwifery Service as approved
by the Minister of Health on the 20th April, 1948**

PART I

Statistical Data

Total number of domiciliary births in the Authority's area.

(a)	1945	..	..	..	..	..	..	..	626
(b)	1946	..	..	..	..	..	..	..	880

EXISTING SERVICES

(A) GENERAL

The existing Municipal Midwifery Service is administered, on behalf of the Local Health Authority by the Blackburn District Nursing Association.

Eight full-time midwives are employed, four of whom live in the District Nurses' Home, St. Peter Street, Blackburn, the other four living in their own homes in different parts of the town. An average of seven pupil midwives assist in the domiciliary midwifery service.

Those of the Queen's Nurses who are also midwives participate in the service in emergencies and during busy periods.

(B) SUPERVISION OF MIDWIVES

The Superintendent and Deputy-Superintendent of the District Nursing Association supervise the work of the midwives employed for purposes of the Municipal Midwifery Service.

A lady Assistant Medical Officer of Health acts as medical supervisor of all midwives in the Borough.

(C) GAS AND AIR ANALGESIA

Practical training in the administration of Gas and Air Analgesia is carried out at Queen's Park Hospital and at Springfield Municipal Maternity Home and the requisite lectures are given at Springfield.

Four of the Municipal Midwives are trained in the administration of gas and air analgesia and the other four are at present waiting to sit for the examination.

Seven sets of apparatus are in the possession of the Association.

Subject to limitations imposed by transport and other difficulties, increasing use is being made of the apparatus.

(D) TRANSPORT

One motor car owned by the Association is available for the transport of municipal midwives. In addition, the Local Health Authority have entered into an agreement with a local taxi proprietor whereby a car service is available for municipal midwifery purposes.

PART II

DESCRIPTION OF THE SERVICE WHICH WILL OPERATE ON THE APPOINTED DAY

GENERAL ADMINISTRATIVE ARRANGEMENTS

The domiciliary midwifery service will be administered on behalf of the Local Health Authority, and subject to the general direction of the Medical Officer of Health, by the Blackburn District Nursing Association.

Ten full-time midwives will be employed. In addition an average of seven pupil midwives will assist in the service.

Before the appointed day an agreement will be negotiated with the Blackburn and District Nursing Association for the administration of the domiciliary midwifery service incorporating financial and other terms.

No joint arrangements will be made with any other Local Health Authority.

ARRANGEMENTS FOR THE SUPERVISION OF MIDWIVES

The Superintendent and Deputy Superintendent of the District Nursing Association will supervise the work of the midwives employed in the domiciliary midwifery service and a lady assistant Medical Officer of Health will act as Medical Supervisor of all midwives in the Borough.

TRANSPORT

One motor car will be available for the transport of domiciliary midwives. In addition, arrangements will continue with a local taxi proprietor for a car service both night and day for the transport of midwives and their equipment.

ANALGESIA

Analgesia apparatus will be available for each domiciliary midwife. Transport to and from cases will be provided. Each midwife will be required to be trained in the administration of analgesia.

PART III

DEVELOPMENT PLAN

SUPERINTENDENT NURSING OFFICER

A Superintendent Nursing Officer will be appointed to the staff of the Medical Officer of Health to co-ordinate the midwifery, health visiting, home nursing and domestic help services, as soon as administrative arrangements permit.

HOUSES FOR MIDWIVES

Whilst, under the present administration, it is desirable that the Queen's Nurse Midwives should be housed at the District Nursing Association premises, the arrangement has certain disadvantages. The premises, though suitably equipped, are occupied to the full and are not conveniently sited for calls on the periphery of the Borough.

As a medium-term policy each midwife will be allotted a specified area of the Borough and be provided with a house (which will also accommodate one or more pupils) from which she can conveniently cover her area.

COUNTY BOROUGH OF BLACKBURN

National Health Service Act, 1946,

Section 24

**Proposals for carrying out arrangements for Health Visiting
as approved by the Minister of Health on the 13th April, 1948**

PART I

Statistical Data

Area of the Local Health Authority	12,625 square miles.
Total mid-1946 population	107300
Number of births in 1946 (residents)	1794

EXISTING SERVICES

At present the Town Council employs ten health visitors and shares the services of another on an equal basis with the Blackburn Education Committee.

The Health Visitors work under the control of the Medical Officer of Health and carry out all duties imposed by legislation and such other duties as the Local Health Authority or the Medical Officer of Health may prescribe.

PART II

DESCRIPTION OF THE SERVICE WHICH WILL OPERATE ON THE APPOINTED DAY

1. The Medical Officer of Health will continue to control the Health Visitors who will carry out all the duties imposed by legislation and such other duties as the Local Health Authority or the Medical Officer of Health may prescribe.

2. Eleven full-time and one part-time Health Visitors (equivalent to the full-time services of $11\frac{1}{2}$ health visitors) will be employed directly by the Authority.

3. No arrangements will be made with Voluntary Organisations for the services of Health Visitors.

4. No joint arrangements with any other Local Health Authority will be made.

TRANSPORT

As the Authority's area is a fairly compact one and is well served by public transport it is not considered necessary to make any special arrangements for the transport of Health Visitors in order to make the best use of their time.

PART III**DEVELOPMENT PLAN****SUPERINTENDENT NURSING OFFICER**

A Superintendent Nursing Officer will be appointed to the staff of the Medical Officer of Health to co-ordinate the Midwifery, Health Visiting, Home Nursing and Domestic Help Services, as soon as administrative arrangements permit.

If it is found that the number of Health Visitors provided for in the preceding part of the proposals is inadequate, additional health visitors will be employed as needed and as they can be secured.

COUNTY BOROUGH OF BLACKBURN

National Health Service Act, 1946,

Section 25

**Proposals for the Provision of a Home Nursing Service as
approved by the Minister of Health on the 15th April, 1946**

PART I

- | | |
|--|--------|
| 1. Area in square miles of Local Health Authority's area | 12.625 |
| 2. Total mid-1946 population | 107300 |

PART II

DESCRIPTION OF THE SERVICE WHICH WILL OPERATE ON THE APPOINTED DAY

GENERAL ADMINISTRATIVE ARRANGEMENTS

1. Home Nursing in the Borough will be provided by arrangement with the Blackburn District Nursing Association. A twenty four hour service will be maintained which will be supervised by the Superintendent and the Deputy-Superintendent of the Association.

2. No nurses will be employed directly by the Authority.

3. Before the appointed day an agreement will be concluded with the Blackburn District Nursing Association for the administration of the home nursing service incorporating financial and other terms.

The employment of twenty-eight full-time persons in addition to the Superintendent and Deputy-Superintendent will be required.

4. No joint arrangement will be made with any other Local Health Authority.

TRANSPORT

The area of the Authority, which is a fairly compact one, is covered by an adequate public transport service. In addition, the District Nursing Association provide one motor-car for the transport of the district nurses in addition to a motor car which is used for administrative purposes.

PART III

DEVELOPMENT PLAN

SUPERINTENDENT NURSING OFFICER

A Superintendent Nursing Officer will be appointed to the staff of the Medical Officer of Health to co-ordinate the midwifery, Health Visiting, Home Nursing and Domestic Help Services, as soon as administrative arrangements permit.

COUNTY BOROUGH OF BLACKBURN

National Health Service Act, 1946.

Section 26

Proposals for carrying out arrangements for Vaccination and Immunisation as approved by the Minister of Health on the 15th April, 1948.

PART I

STATISTICAL DATA

1. Total mid-1946 population of the Authority's area..... 107,300
2. Mid-1946 child population of the Authority's area :

(a) Under 5..	..	..	..	..	..	..	7,390
(b) Ages 5-15	..	..	..	..	..	..	13,130
3. Number of registered live births in the Authority's area in :

(a) 1945	..	..	..	..	..	..	1,478
and (b) 1946	..	..	..	..	..	..	1,794
4. Estimated percentage of mid-1946 child population who had been immunised against diphtheria up to 31st Dec., 1946.

(a) Under 5	..	..	..	..	..	..	52.5
(b) Ages 5-15	..	..	..	..	..	..	92.3
5. An estimate of the number of vaccinations against smallpox and immunisations against diphtheria of children aged 0-15 years which are likely to be undertaken in the year to 31st March, 1949 :

Smallpox	..	..	..	..	..	..	500
Diphtheria	..	..	..	..	..	..	2,000

PART II

DIPHTHERIA IMMUNISATION

A. CHILDREN UNDER 5 :

(a) Immunisations will be carried out :—

- (i) At all Child Welfare Centres.
- (ii) At a special weekly clinic at the Health Office.
- (iii) By general practitioners providing services under the Local Health Authority's arrangements.
- (iv) By a Medical Officer of the Health Department of the Corporation visiting the homes of defaulters, although it is not felt that the results justify the time expended.

- (b) Frequent sessions are held at Child Welfare Centres in different parts of the town and the additional Centre provision which is being made in the proposals submitted under Section 22 of the Act will result in facilities being readily accessible to persons living in any part of the Authority's area and in sessions being held with sufficient frequency and at such hours as will meet local requirements without delay or difficulty for those wishing to take advantage of them.

- (c) Instructions will be given to Health Visitors, Midwives, Teachers, etc., to encourage immunisation.

Health Visitors, in particular, and all other persons whose duties afford them appropriate opportunity, will be expressly urged to encourage immunisation of infants and young children. Health Visitors will be expressly charged with responsibility for making every effort to secure the immunisation of the children under school age in their respective districts of duty, for collecting forms of consent from the parents, and for keeping such note with regard to these children as will enable the Health Visitor to carry out this part of her work systematically.

- (d) The facilities for immunisation will be kept before the public :—

- (i) By means of poster displays at Clinics, etc.
- (ii) By the distribution of birthday cards.
- (iii) By word of mouth propaganda by the staff of the Health Department.

- (e) Posters will be displayed on hoardings, in buses and tramcars, in all Public Health Departments and other municipal offices. Slides and films will be shown periodically at local cinemas.

Medical Officers and Health Visitors will give talks at Child Welfare Centres, Schools, etc.

Notices will also be inserted in local newspapers.

B. CHILDREN OF SCHOOL AGE

- (a) An immunisation team consisting of a doctor, nurse and clerk will tour the schools in the Borough and there immunise children whose parents have signed consent forms as at present.

Arrangements for immunisations to be carried out in individual cases by general practitioners taking part in the Authority's arrangements will apply to schoolchildren as to children under 5.

- (b) The propaganda will be as set out in paragraph A above and will be augmented by propaganda carried on by school nurses and by lectures to parents.

- (c) Children previously immunised in infancy and whose parents consent to reinforcing injections will be treated at school or at the Health Office Clinic.

The arrangements for reinforcing injections will extend to giving such injections as required at any time during the period of school life.

C. RECORDS AND PAYMENT OF FEES.

Medical officers and general practitioners taking part in the Local Health Authority's arrangements will be required to furnish particulars for record purposes in such standard form as may be recommended by the Ministry. On the basis of receiving such particulars the Authority will pay fees to general practitioners on such scales, according to circumstances, as are agreed upon between the Ministry and the profession. The Local Health Authority will itself keep such records and will furnish such particulars in standard form as may be required by the Minister.

D. MEDICAL ARRANGEMENTS.

An opportunity will be given by the Local Health Authority to every medical practitioner in the area, whether or not providing general medical services under Part IV of the Act to provide services under the Authority's arrangements for diphtheria immunisation.

The number of immunisations performed by general practitioners in the past is small and it is anticipated that the bulk of immunisations will continue to be carried out, as at present, by the Local Health Authority's own Medical Officers.

SMALLPOX

A. INFANT VACCINATION.

(a) Arrangements will be made to perform vaccination :—

(i) By a doctor (chosen by the parents) taking part in the Authority's arrangements.

(ii) At some central place where " sessional " vaccination will be arranged.

(b) Vaccination will be encouraged by Health Visitors, Midwives and by means of whatever propaganda may be provided centrally.

(c) It is proposed to send out birthday greetings (similar to those used for the purposes of diphtheria immunisation) to each child immediately the birth is notified or registered, together with a leaflet and Parents' Consent form, pointing out the advantages of early vaccination. The leaflet will give the parents the option of having vaccination performed in either of the ways mentioned in paragraph A(a) immediately above.

B. RECORDS AND PAYMENT OF FEES.

As in C above.

C. ARRANGEMENTS IN THE EVENT OF A SMALLPOX OUTBREAK.

1. Vaccination by the Local Health Authority's own Medical Officers in accordance with the Public Health (Smallpox) Prevention Regulation.

2. Vaccination by general practitioners serving for the purposes of Section 26 of the Act.

3. The opening and staffing of sufficient Vaccination Centres to meet the demand.

The public would be advised about vaccination (or re-vaccination) as a precaution, and fully informed of all the facilities available, including the services of the family doctor.

D. MEDICAL ARRANGEMENTS.

As for diphtheria immunisation.

WHOOPING - COUGH

The Council will make such arrangements as may in due course be recommended by the Medical Officer of Health, who will be responsible for deciding the antigen(s) to be used and for keeping such records as will enable the value of this form of inoculation to be assessed.

National Health Service Act, 1946.

Section 27.

Proposals for the Provision of an Ambulance Service.

The Authority's proposals under Section 27 of the Act are being reviewed by the Minister of Health and will be included in my Annual Report for 1948.

COUNTY BOROUGH OF BLACKBURN.

National Health Service Act, 1946.

Section 28

Proposals for the Prevention of Illness, Care and After-Care as approved by the Minister of Health on the 12th April, 1948.

(A) TUBERCULOSIS

Arrangements will be made with the Regional Hospital Board for the services of a Specialist Medical Officer and with the Lancashire County Council for the services of a Tuberculosis Health Visitor to be available as required to this Local Health Authority in connection with the care and after-care of the tuberculous.

These officers will visit the patients at their homes in connection with prevention and spread of infection, arrange for the examination of contacts, investigate environmental and economic conditions, and will maintain a close liaison with the Authority's general health visiting service, who will provide or assist the patient to obtain services or articles, *e.g.*, home nursing, nursing requisites, appliances and equipment, etc., in appropriate cases.

Assistance will also be given to enable suitable patients to obtain the benefit of the arrangements made by the Ministry of Labour and National Service under the Disabled Persons (Employment) Act. The working of the official scheme will be supplemented where necessary, and close co-operation will be maintained with local industrialists and Trade Union officials and with voluntary organisations.

(B) MENTAL ILLNESS OR DEFECTIVENESS

This Authority have included in their proposals under Circular 100 47, provision for the care and after-care of cases of mental illness or defectiveness by (1) employing a Superintendent Social Worker (jointly with Burnley Local Health Authority) and two Welfare Workers for community care and (2) providing an occupational centre.

(C) OTHER TYPES OF ILLNESS (OR ILLNESS GENERALLY)

The local hospitals will be requested to pass on to the Health Department particulars of cases discharged from those hospitals where after-care including the loan of equipment, is desirable. Likewise, the general practitioners will be invited to notify the Local Health Authority of cases under their care in respect of which the services of the Local Health Authority are desirable.

At the Health Department the cases will be referred to the appropriate quarter, *e.g.*, for Home Nursing, for loan of equipment, to Health Visitors for investigation and, if necessary, advice.

The arrangements in this respect will be such as will not fall to be made by the Authority within the scope of provisions of Part III of the National Assistance Act.

VENEREAL DISEASES

So far as the Authority arranges for the follow-up of patients under treatment for, or known or believed to be suffering from, venereal disease, such arrangements will be carried out in co-operation with the Medical Officers of the treatment centres of the Regional Hospital Board.

HEALTH EDUCATION

The Health Department will continue to make full use of the propaganda material supplied by the National Council for Health Education.

Special campaigns will be conducted from time to time in connection with immunisation against diphtheria and the prevention of venereal diseases. Methods of preventing infectious diseases (particularly those with seasonal incidence) and the facilities offered by the Authority's Maternal and Child Health Service will be constantly brought to the notice of the public.

Lectures will be given by the Medical and Health Visiting Staff, special displays of posters will be arranged on hoardings, public service vehicles, public conveniences, etc., cinematograph films will be shown and advertisements placed in the newspapers and newspaper articles inspired.

Lectures on the Dental Service will also be given by persons competent to undertake this work.

(D) PROVISION OF NURSING EQUIPMENT AND APPARATUS

Nursing equipment and apparatus required by patients who are being confined or nursed at home will be provided and supplied on loan.

A depot will be established from which the articles will be issued by a clerk - storekeeper to be appointed for the purpose, on production of a requisition signed by a doctor, midwife, district nurse, or health visitor.

(E) AFTER-CARE COMMITTEE

This authority will appoint an After-care Committee to deal with the tuberculous, mentally ill and defective, and other cases of sickness in whose case after-care is essential or desirable.

COUNTY BOROUGH OF BLACKBURN

National Health Service Act, 1946,

Section 29

**Proposals for the Provision of Domestic Help as approved
by the Minister of Health on the 13th April, 1948**

PART 1

Statistical Data

- | | |
|--|--------|
| 1. Area in square miles of Local Health Authority's area | 12.625 |
| 2. Mid-1946 population | 107300 |

EXISTING SERVICE

The present Home Help and Domestic Help services are supervised by one of the Health Visitors, which duty she performs in addition to that of supervision of the day nurseries and of child minders. The helps are paid at the rate of 1/4d. per hour plus travelling time and expenses.

An inclusive charge of 1/6d. per hour is made to the users of home helps, but this charge is reduced, and in some cases waived, according to the means of the users. Recovery of charges is assessed in accordance with the scale set out in Circular 110/46—Ministry of Health.

Extensive use has not been made of these services, five being the maximum number of helps being employed at any one time. Whilst this has been, to some extent, due to the shortage of helps, there has not been a big call on the service.

PART II

DESCRIPTION OF THE SERVICE WHICH WILL BE OPERATED ON THE APPOINTED DAY

A joint appointment for a full-time organiser will be made with the Lancashire County Council, to recruit domestic helps and to effect close supervision after recruitment.

It is proposed that the majority of the domestic helps will be employed full-time, but that a small pool of part-time helps be enrolled, who will undertake to give so many hours a week when the demand requires.

To encourage recruits of the latter type, a retaining fee, not normally to exceed 10/- per week will be paid.

It is estimated that 20 full-time and 5 part-time domestic helps will be employed.

PART III

DEVELOPMENT PLAN

In the light of experience, the service operated on the appointed day will be reviewed and modified if necessary.

COUNTY BOROUGH OF BLACKBURN

National Health Service Act, 1946,

Sections 28 and 51

**Proposals for the Provision of a Mental Health Service as
approved by the Minister of Health on the 15th April, 1948**

PART I

Statistical Data

Population of Area	107,300 (Mid 1946)
(a) Number of patients at present chargeable to the Local Authority under the Lunacy and Mental Treatment Acts...	398
(b) Number of patients dealt with under those Acts by the Relieving Officers of the area during the year ending 31st March, 1947.	159
(c) Number of defectives ascertained as subject to be dealt with under the Mental Deficiency Act during the year ending 31st March, 1947.	16
(d) Number of persons reported to the Local Authority as mentally defective in that year.	16

PART II

(A) GENERAL

The service will be controlled by a mental health service sub-committee consisting of five members to whom will be delegated the detailed organisation and control of the service. The Medical Officer of Health will be responsible to the Council for the organisation, control and medical direction of the service.

A full-time clerk will be employed.

(B) MEDICAL

Application will be made to the Regional Hospitals Board for medical officers on the Board's staff who are specialists in mental illness or mental deficiency to act as officers in all cases of doubt or difficulty and under the Medical Officer of Health to undertake the direction of the mental health workers. It is not anticipated that the request for these services will exceed one session per week. A similar application will be made to the Lancashire County Education Authority for the services of the medical officer of the Child Guidance Clinic who is a specialist in mental deficiency with particular reference to school children. The request for these services will, it is anticipated not exceed one session per month.

Medical Officers on the staff of the Health Department who are approved for the purposes of the ascertainment of educationally sub-normal children under the Education Act will deal with the majority of cases for mental deficiency certification.

(C) **NON-MEDICAL**

One male and one female will be appointed whole-time authorised officers and welfare workers.

As the population of Blackburn will not justify the employment of a full-time superintendent social worker, the Burnley Local Health Authority will be invited to join the Blackburn Local Health Authority in the making of a joint appointment on an equal basis.

Application will be made to the Regional Hospitals Board for the services of one of the Board's psychiatric social workers to be available on a part-time basis to meet the requirements of the Local Health Authority. It is estimated that the services of the psychiatric social worker will be required for two sessions per month.

The Health Office, Victoria Street, Blackburn, which will be the administrative centre of the mental health service, will be the centre from which these authorised officers will operate.

An occupational centre will be established in suitable premises in the Borough.

Two-and-a-half persons (the Superintendent Social Worker and the authorised officers and welfare workers above referred to) will be employed in the training of defectives in their own homes. The Superintendent Social Worker and two others will be employed in the training of defectives in the occupational centre. It is not proposed to delegate any of this work to voluntary bodies.

The Local Health Authority will be prepared to undertake the visitation of cases on licence, in the event of the Regional Hospital Board wishing to delegate its responsibilities for these cases to Local Health Authorities.

In the light of experience, the services operated and staff employed on the appointed day will be reviewed and modified as necessary.

(D) **AMBULANCE SERVICE**

Ambulances and sitting case cars to be operated under the proposals of the Local Health Authority for the provision of an ambulance service will be available for the transport of mental patients to hospital. Such patients will be accompanied by one or more mental workers. Where desirable the hospital to which the patient is being removed will be asked to provide the hospital ambulance and trained staff for the removal of the patients.

Town Hall,
Blackburn.

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COUNTY BOROUGH OF BLACKBURN.

EDUCATION COMMITTEE

ANNUAL REPORT

UPON THE

School Health Service

For the Year 1947.



Members of the Education Committee

1947-48

His Worship the Mayor, Alderman R. Sugden, J.P. (Chairman).

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„ A. Townsend.

„ D. B. Worden.

Councillor G. B. Eddie, J.P.

„ H. V. Dowdall, J.P.

„ G. Gillibrand.

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„ G. Mason.

The Rev. W. Molyneux.

The Very Rev. Dean McEnery.

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B. Aspinall, Esq.

F. Duerden, Esq.



PUBLIC HEALTH DEPARTMENT,
VICTORIA STREET,
BLACKBURN.
AUGUST, 1948.

TO THE CHAIRMAN AND MEMBERS
OF THE EDUCATION COMMITTEE :

Mr. Chairman, Ladies and Gentlemen,

I have the honour to present my twenty-first Annual Report, the 42nd of the Series, on the work of the School Health Service during 1947.

Whilst the year under review was not marked by any noteworthy developments in the Service, it proved to be a period of steady progress and most of the activities which were, perforce, temporarily interrupted by the war, have been resumed and consolidated.

Although it has not been possible to secure the services of an Orthoptist, a Physiotherapist commenced duty in March and it is pleasing to report that the Physiotherapy Department is now running at "top gear," with the full co-operation of the Orthopædic Surgeon at the Royal Infirmary (Mr. R. W. Agnew, F.R.C.S.).

The loyal and conscientious work of the Medical, Dental, Nursing, Medical Auxiliary and Clerical staffs is worthy of the highest praise.

From the members of the Education Committee I have invariably received sympathetic consideration and encouragement and to them it is my privilege to express my thanks,

I am, Mr. Chairman, Ladies and Gentlemen,

Your obedient servant,

V. T. THIERENS.

School Medical Officer.

School Clinics.

NAME	PURPOSE	WHERE HELD	TIMES
Inspection Clinic	Special Examination of Cases Referred by Teachers, School Attendance Officers and School Nurses.	68, Victoria Street	Wednesdays, 2 p.m.; Saturdays, 9-30 a.m.
Ophthalmic Clinic	Prescription of Spectacles	68, Victoria Street	Mondays, 2-15 p.m. Fridays, 2-15 p.m.
Dental Clinic	Dental Treatment	,,	Every week-day by appointment.
Minor Ailments Clinic	Treatment of Minor Diseases of Skin, etc.	68, Victoria Street	Every week-day at 8-45 a.m.
Cleansing Station	Treatment of Scabies and Cleansing of Verminous Cases	Blakey Moor	By appointment
Throat Clinic	Operative Treatment of Ade- noids and Enlarged Tonsils.	Blackburn & East Lancs.R.Infirmmary	Arranged as required
,,	,,	Queen's Park Hospital	Arranged as required
Remedial Exercises	Treatment of Deformities.	66, Victoria Street	Every week-day (by appointment)
Diphtheria Im- munisation Clinic	Prevention of Diphtheria	68, Victoria Street	Mondays, 3-45 p.m.
Ultra Violet Light Clinic	Artificial Light Treatment	68, Victoria Street	Every week-day (by appointment)
Consultant Aural Clinic	Treatment of Deafness, etc.	68, Victoria Street	As required.
Orthoptic Clinic	Correction of Strabismus	68, Victoria Street	By appointment
Heart,Rheuma- tism and An- aemia Clinic	Diagnosis and supervision of Cases suffering from Rheuma- tism and Heart defects, and investigation of Anaemia	68, Victoria Street	By appointment.

Section 1

CO-ORDINATION

The School Medical Officer is also the Medical Officer of Health. The Assistant School Medical Officer is also Assistant Medical Officer of Health and the lady Assistant Medical Officer devotes a proportion of her time to duties in connection with the School Health Service. The Resident Medical Officer of the Corporation Hospital regularly conducts routine medical inspections. The whole of the medical staff are consequently familiar with the work of the School Health Service, their work in connection with which brings about close co-ordination between the School Health Service and the various branches of the Health Department.

The record cards of children who have attended the Child Welfare Centres are transferred to the School Health records upon the children commencing attendance at a Primary School or Nursery Class.

SCHOOL HYGIENE

The Assistant School Medical Officer, on the occasion of each visit to a school, inspects the hygienic conditions of the school and, where defects are discovered, they are notified to the Director of Education in order that they may be remedied. During 1947 several special surveys of schools were made with regard to hygienic conditions.

STRUCTURAL WORK AND DECORATIONS CARRIED OUT IN THE ELEMENTARY SCHOOLS.

I have to thank the Borough Engineer for the following details of the work carried out during the year :—

The undermentioned Schools were decorated internally during 1947 :—

St. Anne's.
St. James', Blackamoor.
St. James', Guide.
St. Lukes'.
Furthergate.
Sacred Heart.
Witton Infants.

The internal decoration of Accrington Road and St. Alban's Schools was in hand at the end of the year.

COST OF SCHOOL HEALTH SERVICE

for the year 1946-47

I am indebted to the Borough Treasurer, Mr. J. Bennett, for the following particulars :—

PAYMENTS		£	s.	d.
Salaries	7067	14	3	
Operative treatment of Tonsils and Adenoids	669	9	6	
Printing, Stationery and Postage	65	17	9	
Drugs, Materials and Apparatus.....	520	14	9	
Repair and Upkeep of Premises	753	1	6	
Rents, Rates and Taxes	202	10	2	
Fuel, Light and Cleaning	124	1	2	
Cleansing of Pupils	33	15	0	
Travelling Expenses	14	13	4	
National Insurance	33	0	2	
Orange Juice and Jelly, Malt & Oil, Tonics, &c.	197	2	1	
Incidentals	1	2	3	
	9683	1	11	
RECEIPTS				
Services of Staff to Health Department, Rents, Sales, &c.	67	19	5	
	67	19	5	
Net Cost	9615	2	6	

The rateable value of the Borough in 1946-47 was £753,723.

The gross cost of medical inspection and treatment in both elementary and secondary schools for the twelve months ended March 31st, 1947, was £9,615 2s. 6d., compared with the figure £8,512 14s. 0d., in the year 1945-46.

The Government Grant was 56.0677% of the nett expenditure, leaving a nett charge on the rates of £4,224 2s. 11d.

The cost of the School Health Service for the year 1946-47 per child on the school rolls was 15s. 4d. gross and 6s. 9d. nett, and the cost expressed in terms of a penny rate was 3.21d. gross and 1.41d. nett.

SCHOOL POPULATION

There are 44 Primary and 11 Secondary Schools maintained by the Education Committee in addition to 3 Direct Grant or Independent Schools in the town. There are also 3 Special Schools.

Particulars of attendances at the maintained schools are as follows :—

	No. on Rolls
Primary Schools.....	9714
Secondary Schools.....	3426
Special Schools.....	196
	<hr/>
Total	13336
	<hr/>

Section 2.

MEDICAL INSPECTION.

Routine medical inspections are carried out in the schools by the Assistant School Medical Officers.

A nurse accompanies the doctor to the inspections and prepares the children for examination. In addition, she weighs and measures the children and tests their vision.

In many schools a room is set apart for the medical inspection and in the case of some of the other schools, arrangements have been made for the use of adjacent Assembly Halls or Club Rooms.

All pupils attending Primary Schools are offered a full medical inspection on first admission and again during the last year of attendance. Secondary School pupils are offered the inspection during the last year of their attendance.

The routine inspections comprise a thorough investigation of all systems and a careful enquiry into previous medical history. On the occasion of each visit for routine inspection all cases (whether in the Group Examination or not) previously referred for treatment and for observation are seen by the Medical Inspector. Teachers are also invited to produce any child suspected to be suffering from physical or mental defect.

FINDINGS OF SCHOOL MEDICAL INSPECTIONS.

The following Tables give full details of the findings at all routine medical inspections carried out during 1947 and comparisons are made with previous years.

NUMBER OF ROUTINE INSPECTIONS, 1943 to 1947

Table 1

Code Group	1947	1946	1945	1944	1943
Entrants	1727	1599	894	1500	1104
Intermediates	1023	1065			
Leavers.....	702	507	915	912	940
Total.....	3452	3171	1809	2412	2044

ATTENDANCES OF PARENTS AT ROUTINE MEDICAL INSPECTIONS

Table 2

	No. Ex'd.	Parents Present	Percent Parents Attend- ances.	Boys	Girls
Entrants	1727	1338	77.5	863	864
Intermediates	1023	351	34.3	533	490
Leavers	702	61	8.7	285	417
Total	3452	1750	50.7	1681	1771

Table 3

UNCLEANLINESS

Groups	Condition of head					Condition of Body				1946 %age clean	
	Clean	Dirty	Nits	Pedi- culi	%age clean	Clean	Dirty	Flea- bitten	%age clean	Head	Body
Entrants :—											
Boys	837	—	25	1	96.9	858	2	3	99.4	98.6	98.2
Girls	744	—	119	1	86.1	858	3	3	99.3	88.4	98.7
Intermediates :—											
Boys	524	—	9	—	98.3	522	11	—	97.9	98.0	97.7
Girls	413	—	77	—	84.3	488	2	—	99.5	80.4	99.8
Leavers :—											
Boys	285	—	—	—	100	283	1	1	99.3	100	98.1
Girls	363	1	53	—	87.1	412	5	—	98.8	92.7	100
Totals :—											
Boys	1646	—	34	1	97.8	1663	14	4	98.9	98.5	98.0
Girls	1520	1	249	1	85.8	1758	10	3	99.2	86.3	99.3
Combined Total	3166	1	283	2	91.7	3421	24	7	99.1	92.4	98.6

Table 4

	Percentage of Clean Heads		Percentage of Clean Bodies	
	Boys	Girls	Boys	Girls
1910-1914 inc.	54—			
1920-1923 inc.	93.2		98.1	
1924	98.4	74.1	95.9	92.2
1925	96.9	78.3	96.0	91.5
1926	93.5	64.4	93.6	95.5
1927	96.2	80.0	94.3	94.0
1928	97.6	77.1	96.7	96.8
1929	97.7	76.0	96.6	96.5
1930	98.6	78.4	97.7	97.6
1931	97.0	74.1	97.5	97.6
1932	98.0	79.3	96.0	96.7
1933	93.6	71.9	96.2	97.4
1934	96.7	74.0	98.3	98.6
1935	95.2	72.3	98.3	98.3
1936	97.0	79.8	99.4	99.2
1937	97.3	74.1	98.4	98.9
1938	98.6	78.5	99.0	98.7
1939	93.7	83.5	99.1	99.4
1940	99.2	84.3	99.3	99.1
1941	99.2	80.0	99.6	99.9
1942	99.0	81.7	99.5	98.9
1943	99.6	84.5	99.8	99.0
1944	99.2	83.1	99.6	99.2
1945	99.2	86.1	99.1	99.4
1946	98.5	86.3	98.0	99.3
1947	97.8	85.8	98.9	99.2

NUTRITION

Table 5 gives particulars of the nutritional findings at routine medical inspections of the Code Age Groups during 1947.

Table 5

	Good				Fair				Poor				Total	
	A				B				C					
	B		G		B		G		B		G		B	G
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Entrants ...	547	63.4	584	67.6	281	32.6	258	29.8	35	4.0	22	2.6	863	864
Intermediates	387	72.6	337	68.8	134	25.0	140	28.6	12	2.4	13	2.6	533	490
Leavers	209	73.3	292	70.0	74	25.9	106	25.4	2	0.8	19	4.6	285	417
Total ...	1143	68.0	1213	68.5	489	29.0	504	28.4	49	3.0	54	3.1	1681	1771

Table 6.

SUMMARY OF DEFECTS FOUND AT ROUTINE MEDICAL INSPECTION.

CONDITION	ENTRANTS				INTERMEDIATES				LEAVERS				ALL GROUPS			
	M		F		M		F		M		F		M		F	
	Defects		Defects		Defects		Defects		Defects		Defects		Defects		Defects	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Clothing	27	3.2	36	4.1	16	3.0	6	1.2	4	1.4	5	1.2	47	2.8	47	2.6
Footgear	3	0.3	14	1.6	2	0.4	—	—	2	0.7	1	0.2	7	0.4	15	.84
General Condition	316	36.6	280	32.4	146	27.3	153	31.2	76	26.6	125	30.0	538	32.0	558	31.5
CLEANLINESS :																
Head : Dirty	—	—	—	—	—	—	—	—	—	—	1	.2	—	—	1	0.05
Nits	25	3.0	119	13.7	9	1.7	77	15.7	—	—	53	12.7	34	2.1	249	14.0
Pediculi	1	0.1	1	0.1	—	—	—	—	—	—	—	—	1	0.06	1	0.05
Body : Dirty	2	0.2	3	0.3	11	2.1	2	0.4	1	0.35	5	1.2	14	0.8	10	0.56
Flea-Bitten	3	0.3	3	0.3	—	—	—	—	1	0.35	—	—	4	0.23	3	0.17
Ringworm	—	—	—	—	—	—	2	0.4	—	—	—	—	—	—	2	0.11
Scabies	4	0.5	3	0.3	1	0.2	1	0.2	—	—	2	0.5	5	0.3	6	0.33
Impetigo	4	0.5	—	—	—	—	—	—	1	0.35	—	—	5	0.3	—	—
Other Skin	23	2.6	21	2.5	15	2.8	6	1.2	2	0.7	18	4.3	40	2.9	45	2.5
NOSE AND THROAT :																
Enlarged Tonsils.....	203	23.5	223	25.8	112	21.0	114	23.3	39	13.6	46	11.0	354	21.0	383	21.6
Adenoids	25	3.0	8	0.9	4	0.8	1	0.2	2	0.7	2	0.5	31	1.8	11	0.6
Enlarged T. and A.	23	2.6	28	3.2	—	—	3	0.6	—	—	1	0.2	23	1.3	32	1.8
Other	3	0.3	4	0.5	3	0.54	—	—	1	0.35	1	0.2	7	0.4	5	0.28
En.Glands(non T.B.) ..	161	18.6	151	18.6	117	21.9	80	16.3	43	15.1	29	6.9	321	19.1	260	14.7
EYE DISEASE :																
Squint	27	3.2	40	4.6	23	4.3	19	3.9	1	0.35	5	1.2	51	3.0	64	3.6
Blepharitis	7	0.8	4	0.5	9	1.7	7	1.4	3	1.1	8	1.9	19	1.1	19	1.1
Conjunctivitis	1	0.1	—	—	—	—	—	—	—	—	—	—	1	0.06	—	—
Corneal Opacities ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Ext. Eyes ...	2	0.2	3	0.3	3	0.54	1	0.2	3	1.1	—	—	8	0.47	4	0.22
Defective Vision ...	1	0.1	3	0.3	53	9.9	42	8.6	33	11.6	48	11.5	87	5.2	93	5.2
EAR AND HEARING :																
Otitis Media	4	0.5	1	0.1	—	—	1	0.2	1	0.35	—	—	5	0.3	2	0.11
Hearing	11	1.3	5	0.6	1	0.2	7	1.4	6	2.1	4	0.9	18	1.07	16	0.9
Other	12	1.4	8	0.9	3	0.54	9	1.8	11	3.8	2	0.5	26	1.5	19	1.1
SPEECH :																
Stammer	1	0.1	2	0.2	—	—	—	—	2	0.7	1	0.2	3	0.17	3	0.17
Lisp	1	0.1	2	0.2	—	—	1	0.2	—	—	—	—	1	0.06	3	0.17
Other	14	1.6	11	1.3	1	0.2	1	0.2	1	0.35	—	—	16	0.9	12	0.67
PSYCHOLOGICAL :																
Development	5	0.6	3	0.3	6	1.1	4	0.8	—	—	3	0.7	11	0.7	10	0.56
Stability	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TUBERCULOSIS :																
Pulmonary	—	—	—	—	—	—	—	—	1	0.35	2	0.5	1	0.06	2	0.11
Non-Pulmonary	—	—	1	0.1	1	0.2	1	0.2	1	0.35	—	—	2	0.12	2	0.11

Summary of Defects found at Routine Medical Inspection—*Cont.*

CONDITION	ENTRANTS				INTERMEDIATES				LEAVERS				ALL GROUPS			
	M		F		M		F		M		F		M		F	
	Defects		Defects		Defects		Defects		Defects		Defects		Defects		Defects	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
TICKETS :																
Slight	10	1.1	6	0.7	14	2.6	8	1.6	—	—	—	—	24	1.4	14	0.7
Marked	—	—	—	—	—	—	2	0.4	—	—	—	—	—	—	2	0.11
ORTHOPAEDICS :																
Spinal Curvature ...	1	0.1	—	—	2	0.4	—	—	—	—	—	—	3	0.17	—	—
Posture.....	7	0.8	7	0.8	14	2.6	21	4.3	3	1.1	19	4.5	24	1.4	47	2.6
Flat Foot	10	1.1	10	1.1	11	2.1	6	1.2	7	2.5	6	1.4	28	1.6	22	1.2
Other	71	8.2	73	8.4	36	6.9	33	6.7	11	3.8	16	3.9	118	7.0	122	6.9
DEVELOPMENTAL :																
Hernia	4	0.4	4	0.5	2	0.4	—	—	2	0.7	—	—	8	0.47	4	0.22
Undesc. Test.	4	0.4	—	—	1	0.2	—	—	2	0.7	—	—	7	0.4	—	—
Other	1	0.1	—	—	—	—	2	0.4	—	—	4	0.9	1	0.06	6	0.33
HEART :																
Organic	—	—	1	0.1	—	—	—	—	—	—	—	—	—	—	1	0.05
Functional	20	2.3	19	2.2	20	3.7	28	5.7	8	2.8	33	7.9	48	2.8	80	4.5
Anaemia	44	5.1	19	2.2	28	5.3	14	2.8	9	3.1	9	2.1	81	4.8	42	2.3
LUNGS :																
Bronchitis	61	7.0	28	3.2	35	6.6	10	2.0	3	1.1	2	0.5	99	5.8	40	2.2
Other	14	1.6	20	2.3	10	1.9	8	1.6	2	0.7	4	0.9	26	1.5	32	1.8
NERVOUS :																
Epilepsy	3	0.3	2	0.2	—	—	—	—	1	0.35	1	0.2	4	0.23	3	0.17
Chorea	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other	15	1.7	21	2.5	6	1.1	4	0.8	—	—	10	2.4	21	1.2	35	1.9
OTHER DEFECTS																
	9	1.0	10	1.1	1	0.2	2	0.4	—	—	3	0.7	10	0.6	15	0.84
Total children examined	863		864		533		490		285		417		1681		1771	
	1727				1023				702				3452			

Section 3

TREATMENT

The Education Committee's arrangements for the treatment of school children, comprising facilities provided at their own clinics either by the part-time employment of Consultants or by the Committee's own Medical Officers and by arrangements with hospitals have been continued during the year.

A Consultant Cardiologist now attends at the School Clinics and his services have proved to be most valuable.

Efforts to obtain the part-time services of a Child Health Specialist have not, as yet, been successful, but it is hoped that this very desirable extension to the service will be possible in the near future.

It is anticipated that, when the National Health Service begins to function, some modification will be inevitable in the form of treatment undertaken by the School Health Service, particularly with regard to Consultant's services. If responsibility for any of these services is transferred elsewhere, it is imperative to ensure that the high standard which obtains at present is maintained.

Clinics. All the School Clinics are now housed in the Health Department, Victoria Street.

Inspection Clinics. An Inspection Clinic is held on Wednesday afternoons and Saturday mornings at which the Assistant School Medical Officer examines children referred for special examination by parents, teachers, school nurses, school welfare officers, or from school medical inspection.

During the year 717 children paid 1053 visits to the 101 Inspection Clinics which were held.

Minor Ailments. Treatment of minor ailments is given every morning at the School Clinic, where the Assistant School Medical Officer is in attendance in addition to two school nurses.

The appended table gives a classification of defects treated during the year, together with comparison with 1946.

Table 7.

MINOR AILMENTS

1947. 1946. Comparison with 1946.

Complaint	Cases	Attendances	Average number of attendances per case	Cases	Attendances	Average number of attendances per case	Attendance inc. or dec.	Cases inc. or dec.
Ringworm—Scalp	—	—	—	—	—	—	—	—
Body	8	52	6.5	11	62	5.6	— 10	— 3
Scabies.....	96	289	3.0	167	536	3.2	— 247	— 71
Impetigo	77	770	10.0	112	1053	9.4	— 283	— 45
Other Skin Diseases	55	329	6.0	27	62	2.3	+ 267	+ 28
Minor Injuries	268	1452	5.4	154	964	6.2	+ 488	+ 114
Verminous Head	138	559	4.0	97	404	4.1	+ 155	+ 41
Otorrhoea	23	558	24.0	20	402	20.1	+ 156	+ 3
Other ear defect or disease	38	294	7.7	36	176	4.9	+ 118	+ 2
Blepharitis	18	176	9.7	52	459	8.8	— 283	— 34
Conjunctivitis.....	13	71	5.5	11	75	6.8	— 4	+ 2
Other Ext'l Eye disease...	6	13	2.1	9	18	2.0	— 5	— 3
Miscellaneous	670	2841	4.2	546	2237	4.2	+ 604	+ 124
Totals	1410	7404	5.2	1242	6448	5.1	+ 956	+ 158

Tonsils and Adenoids. Operative treatment of adenoids and enlarged tonsils is undertaken by Mr. Wishart, part-time specialist to the Department, at the Royal Infirmary and Queen's Park Hospital. The parents are allowed to choose at which hospital the operation shall be performed.

Nineteen operating sessions were held at Queen's Park Hospital and seven at the Royal Infirmary. 265 cases in all, undergoing operation.

The Anaesthetic used is Ethyl Chloride.

All children attend the School Clinic the day before admission to hospital and are subjected to medical examination, operation being deferred in respect of those cases whose physical condition warrants postponement. The children are operated on the day after admission and are detained in hospital two nights after operation, when they are taken home by ambulance.

Visual Defects. Mr. Wishart, your part-time Ophthalmic Surgeon attends at the School Clinic on Monday and Friday afternoons to examine children referred from routine medical inspections and the Inspection Clinics. During

1947, 81 sessions were held at which Mr. Wishart examined 740 children of whom 529 were in need of spectacles and for whom spectacles were prescribed.

Of the children examined, 353 were new cases referred for a first examination during the year and of whom 278 were in need of spectacles and for whom spectacles were prescribed.

All spectacles prescribed at the Ophthalmic Clinic are supplied free of charge, the cost of the spectacles being borne by the Education Committee in accordance with the scale of charges prepared by the National Health Insurance Ophthalmic Benefit Committee. If the parents wish to obtain more expensive frames than those allowed under the scale, they may do so provided they bear the extra cost themselves.

Table 8.

Defect	Cases		Percentage of Cases	
	Examined for first time	Examined re change of glasses	Examined for first time	Examined re change of glasses
EXAMINED FOR REFRACTIVE ERRORS :				
Emmetropia (Normal Vision) ...	63	11	17.9	2.8
Simple Hypermetropia	82	106	23.2	27.4
Hypermetropic Astigmatism	93	140	26.3	36.2
Mixed Astigmatism	42	31	11.9	8.0
Myopia	50	54	14.2	13.9
Myopic Astigmatism	23	45	6.5	11.7
Totals.....	353	387	—	—
EYE DISEASES (IN ADDITION TO REFRACTIVE ERRORS) :				
Blepharitis	—	3	—	2.1
Nebulae (Corneal)	2	5	4.6	3.6
Cataract (Congenital)	—	2	—	1.4
Other Eye Diseases	5	15	11.7	10.7
Phlyctenular Conjunctivitis	—	—	—	—
Strabismus	35	94	81.4	67.2
Over 5 Dioptres	1	21	2.3	15.0
Totals.....	396	527	—	—

As stated below, the Orthoptic Clinic is still closed, but Mr. Wishart has, in certain cases of Squint, recommended the wearing of a patch over the "good" eye to encourage the normal functioning of the "squinting" eye.

Selected pupils with seriously defective vision are admitted to the Special Class for Partially Sighted children in the Corporation Park, whilst blind children are admitted to Residential Special Schools.

Details of those children are given in Section 7.

Despite frequent advertisements for the post of Orthoptist, no suitable applicant has been forthcoming, and the Orthoptic Clinic remained closed during the whole of 1947.

Heart, Rheumatism and Anaemia Clinic. During the year, attendances at the Clinic proved extremely satisfactory, there being a total number of 282 attendances.

As described in the report for 1946, the services of the X-ray Department at the Blackburn Royal Infirmary are available for X-ray and Electrocardiographic examinations.

This year, however, arrangements were made for a Consultant Cardiologist to visit the Clinic once a month. Children who were suspected of suffering from a heart defect when examined at a Routine Medical Inspection or at the Inspection Clinic were referred in the first instance, to the Heart Clinic as in previous years.

At this Clinic, the children were further examined by the Assistant School Medical Officer, and those cases which showed symptoms of organic or congenital heart defect or in whom there was still an element of doubt, were referred for examination at the monthly Clinic held by the Cardiologist.

In all, 61 such cases were referred for examination by the Cardiologist, of which 42 proved to be either suffering from no cardiac defect, or were purely functional in origin.

One case, suspected of suffering from a Patent Ductus Arteriosus, and sent to Mr. Graham Bryce at Manchester Royal Infirmary with a view to operative treatment, subsequently proved to be a Congenital Pulmonary Stenosis.

All the cases with organic or congenital cardiac defects are re-examined periodically. The possibility at some subsequent date of submitting certain congenital cases to operation is under constant consideration.

For the estimation of the Haemoglobin, specimens taken at the Clinic have again been sent to the Blackburn Royal Infirmary Laboratory for reading.

Fifteen cases shown to be suffering from Anaemia were placed on a course of Fersolate Tablets and attended the Clinic at subsequent dates for further tests until an improvement was effected.

The subjoined table shows an analysis of all the cases seen during the year, at both the Clinics conducted by the Assistant School Medical Officer and those attended by the Cardiologist.

Table 6. ATTENDANCES AT H.R.A. CLINIC.

Diagnosis	1st Exam	Re-Exam	Exercises		D'ch'g'd or left School	Still on Register	Referred for			
			Fit	Unfit			Hb	ECG	X-Ray	BSR
Rheumatism	1	1	1	—	1	—	—	—	—	—
? Rheumatism	1	—	1	—	1	—	—	—	—	—
Anaemia	6	10	6	—	5	1 {	—	—	—	—
? Anaemia	25	27	25	—	23	2 }	34	—	—	—
Functional Murmur	19	—	19	—	19	—	—	—	—	—
N.A.D.	10	—	10	—	10	—	—	—	—	—
Cases referred to Cardiologist	62	38	62	—	59	3	34	—	—	—
61										
Results of Examinations by Cardiologist :	1st Exam									
Mitral Stenosis	7	33	—	7	—	7	—	5	9	—
Pulmonary Stenosis	2	7	—	2	—	2	—	2	3	1
Mitral Stenosis with Mitral Incompetence	1	2	—	1	—	1	—	—	—	—
Tachycardia	1	1	1	—	—	1	—	—	—	—
Patent Ductus Arteriosus	1	4	—	1	—	1	—	1	—	—
Interatrial Septal Defect	1	2	—	1	—	1	—	—	—	—
? Lutembacher Syndrome.....	1	2	—	1	—	1	—	—	1	—
Tetralogy of Fallot	1	3	—	1	—	1	—	1	1	—
Myocardial Insufficiency	1	4	—	1	—	1	—	1	1	—
Combined defect, with Dextra-Aorta, and										
Pulmonary Stenosis	1	2	—	1	—	1	—	—	1	—
Cardiac Neurosis	1	1	1	—	1	—	—	—	—	—
Bronchitis	1	—	1	—	—	1	—	—	—	—
Functional Murmur	18	30	18	—	15	3	—	2	3	—
N.A.D.	24	29	24	—	24	—	—	—	—	—
Totals	61	123	107	16	99	24	34	11	20	1

Hb : Haemoglobin Estimation. ECG : Electrocardiograph. BSR : Blood Sedimentation Rate.

Ultra Violet Light Treatment. A total of 144 school children underwent ultra-violet light treatment and received a total of 1449 exposures.

Child Guidance Clinic. The Blackburn Education Committee has continued to use the facilities of the Lancashire County Council's Blackburn Clinic, established in Shear Bank Road.

During 1947, 51 new cases were referred to the Clinic, including 4 sent from the Juvenile Court.

Although only three children are shown as "Improved" on discharge from the Clinic, it will be noted from the following table that 19 cases are still attending the Clinic and that 10 others are either being followed-up after examination, or are being advised by the Social Workers in an attempt to effect an improvement in home conditions.

Home conditions are very often the cause of maladjustment, and consequently the parents' co-operation in the home as well as at the Clinic, is a most important factor in the treatment of children referred to the Clinic. Seven cases had of necessity, to be closed during the year owing to lack of co-operation on the part of the parents or guardians.

Table 10.

CHILD GUIDANCE CLINIC REPORT, 1947.

TOTAL NUMBER OF CASES :		REFERRED BY				INTELLIGENCE				RESULT					Total			
		Re-exams carried over from 1946	S.M.O.	Juvenile Magistrates	Police Remand Home	Education Dept.	Others	High (115 +)	Average (85—115)	Low (—85)	Failed to attend for appointment	Diagnostic	Improved	Not Improved		Parents Unco-operative	Others : for follow-up, Advice, etc.	Still Attending
New :	51	3	23	4	—	3	2	6	17	12	—	10	2	—	4	8	11	35
Re-exams :	4																	
<hr/> 55		1	19	—	—	—	—	2	11	6	1	6	1	—	3	2	8	20
TOTAL		4	42	4	4	3	2	8	28	18	1	16	3	—	7	10	19	55

Orthopaedic Treatment and Physiotherapy. A Physiotherapist was appointed in March and the Clinic quickly resumed its former efficiency.

The Physiotherapist attends regularly at the Royal Infirmary where the treatment of her patients is ordered and supervised by the Orthopaedic Surgeon (Mr. R. W. Agnew, F.R.C.S.).

Fifty three school children made an aggregate of 292 attendances to be examined by Mr. Agnew and 17 of them were admitted to the Royal Infirmary for treatment as in-patients.

The following table gives details of the work carried out at the clinic.

Table 11.

ATTENDANCES AT ORTHOPAEDIC CLINIC.

	REMEDIAL EXERCISES				ELECTRICAL TREATMENT			
	School		Pre-School		School		Pre-School	
	Cases	Attendances	Cases	Attendances	Cases	Attendances	Cases	Attendances
Breathing Exercises	18	171	—	—	—	—	—	—
Slight Postural Defects	25	251	—	—	—	—	—	—
Spinal Curvature	7	64	—	—	—	—	—	—
Infantile Paralysis	—	—	—	—	—	—	—	—
Birth Injuries	2	28	—	—	1	25	—	—
Congenital Dislocations	2	70	1	15	1	26	—	—
Pes Cavus and Planus	41	423	2	24	—	—	—	—
Rickets	15	103	7	40	—	—	—	—
Other	11	125	1	1	4	71	—	—
N.A.D.	—	—	—	—	—	—	—	—
T.B. Joints	—	—	—	—	—	—	—	—
Talipes	1	12	—	—	—	—	—	—
Result of Accident	—	—	—	—	—	—	—	—
Totals	122	1247	11	80	6	122	—	—

Table 12

DENTAL TREATMENT

	Number of Half-days Devoted to Inspection	Number of Half-days Devoted to Treatment.	Total Number of Attendances made by Children at the Clinic	No. of Perma't Teeth		No. of Temp'ary Teeth		Total No. of Teeth		No. of Administrations of General Anaesthetics	No. of Administrations of Local Anaesthetics	No. of other Operations				Root Treatments	X-Ray
				Extracted	Filled	Extracted	Filled	Extractions	Fillings			Perm. Dress	Perm. Scale	Temp. Dress	Temp. Scale		
Routine	140	1185	6814	8622928	5688	62	65502990	862	1936	616	338	11	—	—	—	58	52
Specials	—	—	1207	102	301245	10	1347	40	—	847	197	3	3	—	—	—	—
Total	140	1185	8021	9642958	6933	72	78973030	862	2783	813	341	14	—	—	—	58	52

		1946		1947	
Appointments to attend the Clinic were made to the number of	...	7470	7465	6814(91.1%)	6814(91.1%)
The number of appointments kept was	...	6828(90.4%)	6814(91.1%)	1207 Specials	1207 Specials
The number of months made healthy was :	...	1303 Specials	1303 Specials	Total 5394	Total 5566
		4091 Routines	4091 Routines	4359 Routines	4359 Routines

Orthodontia Cases : 227 cases—109PX, 129TX and 56 appliances.

* Including 32 half-days with the Mobile Dental Clinic.

Table 13.

REFERRED FOR TREATMENT—AGE GROUPS

Sex	4 yrs.	5 yrs.	6 yrs.	7 yrs.	8 yrs.	9 yrs.	10 yrs.	11 yrs.	12 yrs.	13 yrs.	14 yrs.	15 yrs.	16 yrs. +	Total
Boys	139	242	280	373	441	417	422	323	297	201	30	12	—	3177
Girls	145	206	336	392	397	381	389	396	335	276	40	18	12	3323
Totals	284	448	616	765	838	798	811	719	632	477	70	30	12	6500

Table 14.

TREATMENT—AGE GROUPS.

Sex	4 years	5 years		6 years		7 years		8 years		9 years		10 years		11 years		12 years		13 years		14 years		15 years		16 years +		Total	
		Routine	Casuals	Routine	Casuals	Routine	Casuals	Routine	Casuals	Routine	Casuals	Routine	Casuals	Routine	Casuals	Routine	Casuals	Routine	Casuals	Routine	Casuals	Routine	Casuals	Routine	Casuals	Routine	Casuals
Boys ...	61	41	134	109	190	93	224	65	241	62	290	39	264	35	225	32	183	26	129	19	56	6	17	5	—	2014	532
Girls ...	59	47	140	87	174	108	267	87	271	80	263	53	258	42	251	23	278	16	235	20	84	9	35	7	18	4233	583
Totals ...	120	88	274	196	364	201	491	152	512	142	553	92	522	77	476	55	461	42	364	39	140	15	52	12	18	4437	1115

Section 5

FOLLOWING UP

When a child is found to be suffering from a physical defect the parents are so notified either verbally or by circular-letter and are advised to secure treatment without delay. A record is kept of all such children, who are then followed up by the School Nurses to ensure that the appropriate treatment is obtained.

Table 15.
WORK OF THE SCHOOL NURSES.

	1	2	3	4	5	Totals
VISITS TO SCHOOLS :						
1. (a) No. of Visits re Cleanliness	87	87	69	89	47	379
(b) No. of Visits re Infectious Diseases ...	2	6	2	—	—	10
(c) No. of Visits for Other Reasons ...	13	12	16	18	4	63
Totals	102	105	87	107	51	452
2. No. of Children Inspected :						
(a) Re Cleanliness	6927	7580	5482	6711	2883	29583
(b) Re Scarlet Fever	—	—	—	—	—	—
(c) Re Diphtheria	—	—	—	—	—	—
(d) Re Other Infectious Diseases	30	159	7	—	—	196
(e) Re Other Reasons	769	278	763	637	193	2640
Totals	7726	8017	6252	7348	3076	32419
3. Cleanliness Inspections :						
(a) No. of Children Clean	5504	5936	4121	5249	2135	22945
(b) No. of Children with Nits or Pediculi...	1423	1644	1361	1462	748	6638
Totals	6927	7580	5482	6711	2883	29583
HOME VISITING BY SCHOOL NURSES :						
Concerning :						
(a) Uncleanliness	82	42	52	16	56	248
(b) Defects found at Routine Inspections	732	584	906	861	661	3744
Totals	814	626	958	877	717	3992
NO. OF CLINIC SESSIONS ATTENDED :	174	167	203	178	173	895

The School Nurse responsible for No. 5 District is a joint School Nurse and Health Visitor.

Section 6

INFECTIOUS DISEASES

With a view to preventing the spread of infectious diseases all home contacts are excluded from school for periods which vary according to the nature of the disease.

Information as to the incidence of non-notifiable infectious diseases is obtained from teachers, welfare officers, sanitary inspectors, health visitors and parents.

The following table gives particulars of cases occurring in school children during 1947.

Table 16.

NOTIFIABLE DISEASES OCCURRING IN THE SCHOOLS OF THE BOROUGH

	Scarlet Fever	Diphtheria	Measles	Whooping Cough	Chicken Pox	Mumps	Erysipelas	Primary Pneumonia	Cerebro- Spinal Meningitis	Acute Polio- Myelitis	Enteritis	Food Poisoning
January	3	—	298	21	14	—	—	—	1	—	—	—
February	4	—	112	7	14	—	—	—	—	—	—	—
March	7	—	62	6	—	—	—	—	—	—	—	—
April	8	—	25	1	5	—	—	—	—	—	—	—
May	7	—	12	6	37	—	—	—	—	—	—	—
June	5	—	33	37	28	4	—	—	—	—	—	—
July	13	—	34	14	12	5	—	2	—	—	—	—
August	4	—	10	17	1	—	—	—	—	—	—	—
September	23	2	4	10	4	1	—	—	—	—	—	—
October	20	2	3	29	2	46	—	1	—	—	—	—
November	15	—	1	36	17	102	—	2	—	1	—	—
December	5	1	6	48	26	147	1	1	—	—	4	4
Totals ...	114	5	600	232	160	305	1	6	1	1	4	4

October, with 46 notifications, saw the beginning of a mumps epidemic which, starting in the Mill Hill district, spread to most parts of the town and, in December when 147 cases were notified, the incidence of the disease had not yet reached its peak.

The incidence of Scarlet Fever was again low (114 school children). The disease was of mild type and there were no deaths.

Only five cases of diphtheria were notified in school children during the year, the same as in 1946; of cases notified 3 only proved to be suffering from the disease. This compares with 106 cases in 1937 and 125 cases in 1938.

This continued low incidence fully justifies the energetic measures which have been and are being taken and which have resulted in all but a small percentage of the children attending Blackburn Schools being immunised against Diphtheria.

The parent of each child admitted to school is invited to have the child immunised and, at regular intervals, a doctor and nurse visit each school to carry out the immunisations of children whose parents have given consent.

An important factor in the success of the immunisation scheme in Blackburn has been the wholehearted co-operation of Head Teachers and their staffs.

Section 7

HANDICAPPED PUPILS.

Ascertainment.—The arrangements for the ascertainment of pupils requiring special educational treatment as defined by the Handicapped Pupils and School Health Service Regulations made under the Education Act, 1944, are as described in my Annual Report for 1946.

Table 17.

SUMMARY OF HANDICAPPED PUPILS, END OF 1947.

CATEGORY	Type of School Attending						Not Attending any School		TOTAL	
	Special Day		Special Residential		Ordinary School					
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Blind	—	—	2	2	—	—	—	—	2	2
Partially Blind ...	8	8	—	—	—	—	—	—	8	8
Deaf	—	—	5	3	1	—	—	2	6	5
Partially Deaf ...	—	—	1	—	2	—	—	—	3	—
Delicate	91	88	—	—	7	3	—	—	98	91
Diabetic	—	—	—	—	—	—	—	—	—	—
Educationally Sub-Normal ...	—	—	2	1	53	31	—	2	55	34
Epileptics	—	—	2	1	2	1	—	—	4	2
Maladjusted ...	—	1	—	—	4	2	1	—	5	3
Physically Handicapped...	—	1	1	—	4	5	5	3	10	9
Speech Defects	—	—	—	—	57	15		—	57	15
Multiple Disabilities ...	—	—	1	1	2	—	1	—	4	1
Total (All Categories) ...	99	98	14	8	132	57	7	7	252	170

Children with speech defects either attend the Special Remedial Speech Class or are on the waiting list for the Class.

SPECIAL EDUCATIONAL TREATMENT

Details of provision made in respect of each category of handicapped pupils are given below.

Blind Pupils. The Education Committee make arrangements with various special residential schools for the admission of suitable cases. At the end of the year, one boy and two girls were in the School for the Blind, Hardman Street, Liverpool, and one boy was in the Homes for the Blind, Preston.

On being discharged from Special Schools, certain blind pupils are admitted to the Local Workshops for the Blind for training and subsequent employment.

Partially Blind Pupils. The Education Committee maintain a special school for Partially Sighted Pupils in the Corporation Park. The children are selected for admission by the consultant Oculist who re-examines them twice yearly during their attendance.

At this school all close work is reduced to a minimum and the reading of ordinary school books is prohibited ; the only reading allowed is from letter press, often prepared by the children themselves, each letter being not less than 1" in height. Oral work occupies a large proportion of the curriculum and comprises nature study, history and geography, object lessons, description by the teacher of important current events, followed by a discussion in which the children take part.

Handicraft work is encouraged, the work being such as will develop manual dexterity without demanding close ocular attention.

Physical exercises are modelled on the Ministry's Curriculum with the proviso that exercises demanding strain and violent movement are avoided. At the end of the year 8 boys and 8 girls were in attendance at the School.

Deaf Pupils. Several Residential Special Schools for the deaf in different parts of the country admit suitable cases from Blackburn. At present there are 5 boys and 4 girls in the Royal Cross School for the Deaf, Preston, and one boy in the St. John R.C. Institution for the Deaf and Dumb, Boston Spa.

Partially Deaf Pupils. At present no provision is made for the special educational treatment of partially deaf pupils, only three of whom appear on the register. It is anticipated that the projected hearing survey will reveal a sufficient number of suitable pupils to warrant the establishment of a special class in the Borough for their special educational treatment.

Delicate Pupils. Excellent provision for the special educational treatment of delicate pupils is made at the Open Air School at Black-a-moor, which was opened in August, 1939, and which has proved a most valuable acquisition. A School Nurse is in full-time attendance at the school and the Assistant School Medical Officer visits once each week.

One hundred and ninety nine children were on the register at the end of 1946, 61 were admitted and 79 discharged during the year ; thus 181 children were in attendance at the end of 1947. The average duration of attendance of those discharged was two years three months, and the average increase in weight was 14.75 lbs.

The reasons for the admission of the 260 children who attended during the year were as follows :—

Subnormal Nutrition	...	...	...	...	85
Anaemia	...	...	...	...	35
Debility	...	...	...	...	38
Bronchitis	...	...	...	...	44
Asthma	...	...	...	...	18
Tuberculosis	...	..	...	..	5
Bronchiectasis	...	...	...	...	2
Scoliosis	...	...	...	...	1
Paresis	...	...	...	...	2
Other conditions	...	...	...	...	30

Pupils are selected for admission by the Assistant School Medical Officer, who re-examines them on admission to the school and at three-monthly intervals thereafter.

Each child is supplied with milk twice a day, is provided with a hot mid-day meal and there is a daily rest period of one hour. All the children receive iron tonic and emulsion or extract of malt every day.

Minor ailments are treated by the School Nurse who also superintends the weekly shower bath of each child. Every child is weighed at least once a month.

The Physical Training Organiser visits twice a week to give remedial exercises.

The attendances during 1947 were satisfactory. The average attendance was 86.2 per cent : the highest weekly percentage of average attendance being 98.8 per cent.

Diabetic Pupils. There are no diabetic pupils on the register at present.

Educationally Subnormal Pupils. At present no provision is made by this Authority for the Special Educational treatment of Educationally Subnormal Children.

At the end of the year there were a total of 93 educationally subnormal pupils on the register. One boy is in the Beacon School, Lichfield, whilst two children, one boy and one girl, are in Grafham Grange Residential School, Guildford, and Allerton Priory Residential School, Liverpool, respectively ; the two latter cases are transfers from other Authorities, and the financial

responsibility for their maintenance at the school has been assumed by the Education Committee. One boy, who is also maladjusted is in Pontville R.C. Special Residential School, Ormskirk, whilst a girl, who is also deaf is in the Royal Cross School for the Deaf, Preston. Eighty-four were attending ordinary schools and two were not at school. All these children require special educational treatment and the absence of facilities for such treatment is a matter for concern.

Improved methods of ascertainment during the year have resulted in a large number of additions to the register and it is anticipated that many more names will be added during the coming year.

Although the Residential School which the Education Committee propose to provide at Longridge will, to some extent, alleviate the position, there will remain an urgent need for a special day school and for special classes for this type of pupil.

During the year nine pupils were reported to the Local Authority for the purposes of the Mental Deficiency Acts.

Epileptic Pupils. Arrangements are made for the admission of epileptic pupils to various residential schools. At the end of the year one boy was at the Home for Epileptics, Much Hadham, one boy was at the Home for Epileptics, Maghull and one girl was at the Soss Moss School for Epileptics, Manchester. Two boys and one girl who suffer from varying degrees of epilepsy are in attendance at ordinary schools.

Maladjusted Pupils. An increasing number of maladjusted pupils require to be dealt with. Many of them receive appropriate treatment at the Child Guidance Clinic but a proportion of them show evidence of emotional instability or psychological disturbance and require special educational treatment in order to effect their personal, social or educational re-adjustment.

There are 11 pupils of this type at present on the register but, owing to the shortage of Special Residential School accommodation, it has been possible to secure the admission of only one of them, who is also educationally subnormal, to such a school; the remainder, including two who are also educationally subnormal, continue to attend ordinary schools, whilst one is in attendance at the Open Air School.

Physically Handicapped Pupils. This category includes those pupils, not being pupils suffering solely from a defect of sight or hearing, who by reason of disease or crippling defect cannot be satisfactorily educated in an ordinary school or cannot be educated in such a school without detriment to their health or educational development.

At the end of the year there was a total of 19 pupils in this category, 9 of whom were attending ordinary schools, 1 at the Open Air School and

8 at no school. The remaining case, a transfer from the Lancashire County Council, is in the Bethesda Home for Crippled Children, Colwyn Bay.

It is anticipated that the new Orthopaedic arrangements will bring an additional number to light, and the Education Committee may be called upon to consider the provision of a Special Residential School for physically handicapped pupils, if necessary, in conjunction with a neighbouring authority.

Pupils Suffering from Speech Defects. There is no special school for the treatment of pupils suffering from speech defects, but the Committee provide a special class in Barton Street School for this purpose.

The children continue to attend ordinary schools and visit the Special Class twice each week, the classes lasting approximately one hour. Of the 16 periods in the week 10 are devoted to the treatment of stammering, 4 to nasal and cleft palate speech and 2 for lisping.

The teacher in charge of the class devotes each Wednesday to visiting the homes and schools of the children attending.

At the end of the year 47 pupils, including 6 from outside the Borough were attending the Speech Class and 31 were on the waiting list.

The following tables give details of attendances and results obtained during 1947 :—

Table 18.

REMEDIAL SPEECH CLASS

	Stam- merers	Lispers	Cleft Palate	Others	Total	Enuresis
No. on register at beginning of the year	31	2	2	18	53	1
No. admitted during the year.....	7	1	3	8	19	1
No. discharged or left during the year	14	1	1	9	25	2
No. in attendance at the end of the year	24	2	4	17	47	—

Table 19.

RESULT OF TREATMENT OF CHILDREN DISCHARGED DURING THE YEAR

	Stam- merers	Lispers	Cleft Palate	Others	Total	Enuresis
Cured	5	—	—	2	7	—
Much improved	7	1	—	6	14	—
Slight Improvement	—	—	—	—	—	2
Condition unchanged, left town, etc.	2	—	1	1	4	—
Total	14	1	1	9	25	2

Children now in attendance at the classes, include 6 from outside the Borough, viz. : Darwen, Coppull, Adlington, Heath Charnock and Preston. These are all showing good progress.

Section 8

MISCELLANEOUS

Co-operation of Parents. The presence of parents is encouraged at both School Medical Inspection and at the various clinics. For the most part the parents have been appreciative of the work of the Department and have followed the advice given by the staff.

Co-operation of Teachers. The assistance given by the teachers in every aspect of the school medical work has been invaluable. Much additional work has been thrown upon them and I am grateful for their continued co-operation.

Co-operation of the School Welfare Officers. To the School Welfare Officers I must express my thanks. The information gained by them in the course of their visits to homes is passed to the School Health Service and greatly facilitates the work of the staff.

Their co-operation in obtaining attendance of children at Clinics is most valuable and has done much towards securing treatment of defects.

The National Society for the Prevention of Cruelty to Children. Nine cases were reported to the Society by officials of the School Health Service. Seven were for general neglect and two were for assault and ill-treatment. Eight of the cases were supervised until satisfactory improvement was effected, whilst one case was still under supervision at the end of the year.

I would like to express the thanks of the School Health Service staff for the unfailing help rendered by the Society's Inspector, Mr. King.

Licensing of Children for Entertainments during 1947. During 1947, two troupes of dancing girls, comprising a total of 20 girls, all licensed to perform on tour, appeared at the Grand Theatre. Their lodgings, dressing room accommodation, licences, school records, etc., were all examined by the School Welfare Officers.

Employment of Children and Young Persons. Shortly before the school leaving age is reached juvenile employment cards are completed by the Assistant Medical Officer, who examined 702 children for employment during 1947.

348 children (297 boys and 51 girls) were licensed (after a special medical examination) for employment out of school hours. The majority are engaged in the delivery of milk, newspapers, groceries, etc. In 6 cases certificates were refused on account of the children being medically unfit.

Deaths of School Children, 1947.

Tuberculous Meningitis	3
Heart Disease	2
Broncho-Pneumonia and Measles	1
Accidents	4
Other Diseases	3

Nursery Classes. There are 28 Nursery Classes in the Borough with accommodation for a total of approximately 1,000 children between the ages of 3 and 5 years. Inspection findings of children in attendance at their classes are incorporated in the "Entrant group" of routine medical inspection.

The School Nurses visit each Nursery Class at frequent regular intervals.

Payments. Prior to the operation of the Education Act, 1944, specific charges were made to parents according to their means in respect of certain services rendered by the School Health Service, e.g. tonsils and adenoid operations, maintenance in special residential schools, etc., and voluntary contributions towards the cost of the treatment were solicited in respect of other services, e.g. dental treatment, ultra violet light treatment, etc.

All treatment and services afforded by the School Health Service are now free of cost to the parents and, since July, 1946, the cost of spectacles for pupils attending maintained schools and ordered by the Authority's Ophthalmic Surgeon, is borne by the Authority.

Physical Education. I am indebted to the Director of Education for the following report on physical education in the schools.

During the year ending 31st December, 1947, the standard of Physical Education in many schools and Youth centres has improved. This is probably

due to the return of men teachers from H.M. Forces with the resulting improvement in the staffing of schools. In addition it has been possible to plan on normal lines in lieu of the uncertainty etc., during the war years.

It is worthy of note that throughout the year there has been some 3,500 organised games of football, cricket, hockey, etc., on the Education Committee Playing Fields. In spite of the constant hard wear and tear the playing fields have been kept in very good condition and new pavilions have been provided at Troy and Pleckgate to meet the ever increasing demands from the schools and the Youth Service. Permission to purchase a Bedford Truck, gang-mowers and rollers has been passed by the Education Committee in order to maintain the playing fields in as good a condition as possible. Date of delivery is uncertain owing to the present difficult supply position.

The supply of equipment has improved but owing to increases in price and purchase tax, several schools have only received a proportion of their requirements. However, it is gratifying that Blackburn is one of the first Authorities to purchase the new Primary Gymnasias in two of its schools. London and Manchester are the only other Authorities who have purchased this new apparatus.

The Harrison Gymnasium has been used to capacity during the year. During the day the Technical High School and 3 Primary Schools use the gymnasium for their P.T. lessons. Each evening of the week there have been P.T. classes for boys and girls (13 to 20 years of age). On Saturdays three badminton courts are used by members of the Harrison Institute.

Remedial classes have been continued at Blackamoor Open Air School, and each child attends the classes when admitted to the School.

Several Football Competitions have been arranged by the Blackburn School's Athletic Association for Junior and Senior boys. The Girls' Games Committees have arranged several netball rallies for junior and senior girls. Area Athletic Sports were held throughout the summer months and Blackburn sent a strong team to the Annual Lancashire County School Sports at Warrington.

A very successful Youth Week was held in June. It gave an indication of the rapid expansion of the Youth Service. Entries for the Swimming, Tennis, Netball, Boxing Tournaments and Athletic Sports were far in excess of any previous year. There has also been an increase in the number of teams in the Senior and Junior Youth Football Leagues.

The Swimming season has again been a successful one. Many life-saving awards were gained and it is pleasing to note that Blackburn gained the highest number of life-saving awards in the Lancashire Area.

Milk Supplied in Schools. During the year, 1,935,541 bottles (each bottle containing $\frac{1}{3}$ pint) were supplied to children free of charge, including 59,350 bottles to children attending Blackamoor Open Air School.

Provision of Meals for School Children. During 1947, a total of 1,043,048 meals were supplied in all schools.

I am indebted to the Director of Education for the following comments and menus for summer and winter which are followed, as far as as supplies of food allow, in the school kitchens, including the Black-a-moor Open Air School Kitchen.

Menus. The menus in schools during the year 1947 have been in line with the Ministry of Education's recommendations. The central kitchens have, so far as has been possible kept to a three week's menu prepared by the Organiser which is varied according to the climatic conditions. The full amount of rationed foods has been taken up by all the kitchens and all food supplies have, on the whole, been satisfactory.

Dietary for Summer Months.

1st Week.

1. Brown Stew.
Boiled potatoes.
Root vegetables.
Milk pudding and fruit or Jam tart or Valencia Mould.

2. Beef Galatine, Gravy.
Mashed Potatoes.
Salad with salad dressing.
Chocolate Steamed pudding and custard.

3. Meat or vegetable pasties, Gravy.
Boiled potatoes.
Pulse vegetables.
Eve's pudding and custard.

4. Roast meat, Gravy.
Boiled or roast potatoes.
Green vegetables.
Sponge cake with stewed fruit or orange jelly.

5. Baked Fish or Salmon Mould, Parsley Sauce.
Mashed potatoes.
Spaghetti or beans in tomato.
Bakewell tart or fruit charlotte, custard.

2nd Week.

1. Corned Beef (sliced), Gravy.
Mashed potatoes.
Pulse vegetables.
Steamed sponge pudding and jam sauce.

2. Shepherd's pie, Gravy.
Root vegetables.
Jam or syrup tart and custard.

3. Minced roll (hot or cold), gravy.
Boiled potatoes, Salad with dressing.
Orange jelly with fruit, or gingerbread or Crunchies, or milk pudding.

4. Roast meat or ham, gravy.
Roast or Boiled potatoes.
Green vegetables.
Trifle.

5. Cheese Pie or Vegetable and Cheese Hot Pot.
Boiled potatoes.
Cauliflower or Swedes.
Cornflour Mould with Rhubarb tart or Tart with stewed fruit in season.

3rd Week.

1. Haricot mutton, dumplings.
Potatoes, Root Vegetables.
Orange jelly with sponge cake and custard.

2. Cornish Pasties, Gravy.
Roast or boiled potatoes.
Salad.
Baked or raw apples and custard or Stewed fruit and cornflour mould or milk pudding.

3. Roast meat, Gravy.
Roast or boiled potatoes.
Green vegetables.
Fruit pudding (suet pastry) with white sauce, or Jam roll and custard.

4. Beef Steak and kidney pudding, Gravy.
Boiled potatoes, Root Vegetables.
Apple Amber pudding or Milk pudding or Stewed Fruit and custard.

5. Fish Cakes and parsley sauce, or Sausage and Gravy.
Potatoes, Beans or spaghetti in tomato.
Fig or Date pudding and custard.

Dietary for Winter Months.

1st Week.

1. Roast Beef or Mutton, Gravy.
Baked or boiled potatoes, Carrots and swedes.
Sponge fruit pudding and white sauce.

2. Cottage Pie, Gravy.
Peas or beans.
Bakewell tart and jam sauce.

3. Bacon and liver, fried or stewed, Gravy.
Mashed Potatoes, Cabbage or sprouts.
Steamed sponge pudding and custard.

4. Meat Pie, Gravy.
Potatoes, Mixed salad or beans.
Soyghetti pudding, stewed fruit or jam.

5. Steamed fish, Tomato sauce,
Mashed potatoes, Beans in tomato.
Shortbread, Orange juice jelly.

2nd Week.

1. Hot Pot.
Cabbage and sprouts.
Jam tart and custard.

2. Boiled ham or mutton.
Potatoes, carrots and turnips.
Steamed sponge pudding and white sauce,

3. Brown stew and dumplings.
Potatoes, Peas and beans.
Trifle.

4. Roast meat, Gravy.
Baked potatoes or chips.
Salad or beans.
Fruit tart or fruit suet pudding, custard.

5. Fish Cakes or Fish Pie, Parsley Sauce,
Mashed potatoes, Spaghettii in tomato.
Baked sponge pudding and jam sauce.

3rd Week.

1. Steak and kidney pie.
Potatoes, Carrots and swedes.
Milk pudding with stewed fruit or raisins.

2. Corned beef, sliced or coated with batter, fried.
Gravy, Potatoes, Cabbage or sprouts.
Jam roly poly and white sauce.

3. Steamed meat roll. Gravy.
Mashed Potatoes, Peas or beans.
Orange juice jelly and biscuits.

4. Cornish pasties, Gravy.
Potatoes, Salad or beans.
Baked Jam Roll or Eve's Pudding.

5. Sausage and gravy or Cheese Pie.
Potatoes, Peas or beans.
Syrup Tart and custard.

Table 20.

CHIEF CAUSES OF EXCLUSION FROM SCHOOL.

Condition	Exclusions carr. fwd. from 1946	Exclusions	Returns	Still excluded Dec. 1947
Ringworm—Head	—	—	—	—
„ Body	—	3	3	—
Nits and Vermin	1	27	28	—
Impetigo	4	18	21	1
Scabies	18	57	75	—
Small Pox	—	—	—	—
Scarlet Fever.....	8	215	215	8
Measles	136	600	733	3
Diphtheria	1	21	19	3
Whooping Cough	14	232	213	33
Chicken Pox	5	160	157	8
Mumps	—	305	244	61
External Eye Disease	—	—	—	—
Sore Throat	1	4	5	—
Other Causes	13	6	19	—
Ear Defects	—	—	—	—
Total	201	1648	1732	117

The number of exclusions by reason of infectious diseases includes those from the same household who have been excluded as contacts.

Table 21.

Heights and Weights 1947

Year of Birth	BOYS			GIRLS		
	No.	Average Height in Inches	Average Weight in Pounds	No.	Average Height in Inches	Average Weight in Pounds
1932	2	62	106 $\frac{3}{4}$	38	62	108 $\frac{1}{2}$
1933	290	58	85 $\frac{3}{4}$	335	60 $\frac{1}{2}$	96 $\frac{1}{4}$
1934	1	55 $\frac{1}{2}$	85 $\frac{3}{4}$	16	63	108 $\frac{1}{2}$
1935	189	54 $\frac{1}{4}$	72 $\frac{1}{2}$	135	54 $\frac{3}{4}$	73 $\frac{1}{4}$
1936	344	54	69	358	53 $\frac{3}{4}$	70 $\frac{1}{4}$
1937	—	—	—	1	51 $\frac{1}{2}$	56 $\frac{1}{2}$
1938	—	—	—	—	—	—
1939	2	50	52 $\frac{1}{2}$	—	—	—
1940	26	47 $\frac{1}{4}$	51 $\frac{1}{2}$	26	46 $\frac{1}{4}$	43
1941	99	43 $\frac{1}{2}$	44 $\frac{1}{2}$	97	44	43
1942	285	42 $\frac{1}{2}$	39 $\frac{3}{4}$	325	42	39 $\frac{3}{4}$
1943	292	40 $\frac{1}{4}$	35	268	39 $\frac{3}{4}$	35 $\frac{3}{4}$
1944	118	38	35 $\frac{1}{4}$	101	37 $\frac{1}{2}$	34

MINISTRY OF EDUCATION. MEDICAL INSPECTION RETURNS.
YEAR ENDED 31st DECEMBER 1947

Table 22.

MEDICAL INSPECTION OF PUPILS ATTENDING MAINTAINED
PRIMARY AND SECONDARY SCHOOLS

A—PERIODIC MEDICAL INSPECTIONS

Number of Inspections in the prescribed Groups:

Entrants	...	...	...	...	1727
Second Age Group	...	...	...	...	1023
Third Age Group	...	...	...	...	585
Total	...	...	...	...	3335

Number of Periodic Inspections 117

Grand Total 3452

B.—OTHER INSPECTIONS

Number of Special Inspections 5172

Number of Re-Inspections 7578

Total 12750

C.—PUPILS FOUND TO REQUIRE TREATMENT

*Number of Individual Pupils found at Periodic Medical Inspection to
Require Treatment (excluding Dental Diseases and Infestation with Vermin).*

Group	For defective vision (ex'd'ng squint)	For any of the other conditions recorded in Table 23	Total individual pupils
(1)	(2)	(3)	(4)
Entrants	3	198	201
Second Age Group	86	122	208
Third Age Group	59	47	106
Total (prescribed groups)	148	367	515
Other Periodic Inspections ...	12	16	28
Grand Total	160	383	543

Table 23.

A. RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION

Defect Code No.	Defect or Disease (1)	PERIODIC INSPECTIONS		SPECIAL INSPECTIONS	
		No. of Defects		No. of Defects	
		Requiring treatment (2)	Requiring to be kept under observation but not requiring treatment (3)	Requiring treatment (4)	Requiring to be kept under observation but not requiring treatment (5)
4.	Skin	25	8	9	—
5.	Eyes —a. Vision ...	160	14	124	4
	b. Squint ...	90	10	35	1
	c. Other ...	5	7	3	—
6.	Ears —a. Hearing ...	6	13	3	—
	b. Otitis Media	1	1	3	—
	c. Other ...	14	11	3	—
7.	Nose or Throat ...	102	320	194	16
8.	Speech	8	12	15	—
9.	Cervical Glands ...	11	132	5	1
10.	Heart and Circulation	76	91	19	—
11.	Lungs	24	90	45	1
12.	Developmental—				
	a. Hernia ...	3	4	1	—
	b. Other ...	3	6	1	—
13.	Orthopaedic—				
	a. Posture ...	22	20	2	1
	b. Flat Foot	16	28	16	—
	c. Other... ..	29	72	24	—
14.	Nervous System—				
	a. Epilepsy ...	1	5	1	—
	b. Other ...	2	14	9	—
15.	Psychological—				
	a. Development	7	6	4	1
	b. Stability ...	—	1	19	—
16.	Other	2	6	143	1

**B. CLASSIFICATION OF THE GENERAL CONDITION OF PUPILS INSPECTED
DURING THE YEAR IN THE AGE GROUPS**

Age Groups	Number of Pupils Inspected	A (Good)		B (Fair)		C (Poor)	
		No.	% of col. 2	No.	% of col. 2	No.	% of col. 2
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Entrants	1727	1131	65.5	539	31.2	57	3.3
Second Age Group	1023	724	70.8	274	26.8	25	2.4
Third Age Group	585	441	75.4	138	23.6	6	1.0
Other Periodic Inspections ...	117	60	51.2	42	35.9	15	12.9
Total	3452	2356	68.2	993	28.8	103	3.0

Table 24.

TREATMENT TABLES

GROUP I.—MINOR AILMENTS (excluding Uncleanliness, for which see Table 3).

(a)	Number of Defects treated, or under treatment during the year
SKIN—	
Ringworm—Scalp—	
(i) X-Ray treatment. If none, indicate by dash	—
(ii) Other treatment	—
Ringworm—Body	8
Scabies	96
Impetigo	77
Other skin diseases	55
Eye Disease	37
(External and other, but excluding errors of refraction, squint and cases admitted to hospital).	
Ear Defects	61
(Treatment for serious diseases of the ear (<i>e.g.</i> operative treatment in hospital) should not be recorded here but in the body of the School Medical Officer's Annual Report).	
Miscellaneous	1076
(<i>e.g.</i> minor injuries, bruises, sores, chilblains, etc.).	
Total	1410

(b) Total number of attendances at Authority's minor ailments clinics 7404

GROUP II.—DEFECTIVE VISION AND SQUINT (excluding Eye Disease treated as
Minor Ailments—Group I.)

	No. of defects dealt with			
ERRORS OF REFRACTION (including squint). (Operations for squint should be recorded separately in the body of the School Medical Officer's Report)	891
Other defect or disease of the eyes (excluding those recorded in Group I.)...	32
Total	923
No. of Pupils for whom spectacles were (a) Prescribed	529
(b) Obtained	385

GROUP III.—TREATMENT OF DEFECTS OF NOSE AND THROAT

	Total number treated.			
Received operative treatment—				
(a) for adenoids and chronic tonsillitis	265
(b) for other nose and throat conditions	—
Received other forms of treatment	—
Total	265

GROUP IV—ORTHOPAEDIC AND POSTURAL DEFECTS

(a) No. treated as in-patients in hospitals or hospital schools ...	...	...	...	17
(b) No. treated otherwise <i>e.g.</i> in clinics or out-patient departments ...	...	...	...	175

GROUP V.—CHILD GUIDANCE TREATMENT AND SPEECH THERAPY

No. of pupils treated (a) under Child Guidance arrangements ...	...	...	...	55
(b) under Speech Therapy arrangements ...	...	...	...	72

Table 25.

DENTAL INSPECTION AND TREATMENT.

(1) Number of pupils inspected by the Authority's Dental Officers—								
(a) Periodic age groups ...	...	...	...	...	...	...	...	13422
(b) Specials ...	...	...	...	...	...	...	...	1207
(c) TOTAL (Periodic and Specials) ...	...	...	...	...	...	...	...	14629
(2) Number found to require treatment ...	...	...	...	...	...	...	...	7707
(3) Number actually treated ...	...	...	...	...	...	...	...	5565
(4) Attendances made by pupils for treatment ...	...	...	...	...	...	...	...	8021
(5) Half-days devoted to : (a) Inspection ...	...	...	...	...	...	...	...	140
(b) Treatment ...	...	...	...	...	...	...	...	1153
Total (a) and (b)								1293

(6) Fillings :	Permanent Teeth	...	...	...	...	...	2958
	Temporary Teeth	...	...	...	...	...	72
							—
	Total	...	...	...	...	...	3030
(7) Extractions :	Permanent Teeth	...	...	...	...	...	964
	Temporary Teeth	...	...	...	...	...	6933
							—
	Total	...	...	...	...	...	7897
8) Administration of general anaesthetics for extraction		...	...	...	...	...	862
(9) Other Operations	(a) Permanent Teeth	...	...	...	...	...	1212
	(b) Temporary Teeth	...	...	...	...	...	14
	Total (a) and (b)						1226

Table 26.

INFESTATION WITH VERMIN.

NOTES.—A statement as to the arrangements made by the Local Education Authority for the examination and cleansing of infested pupils should appear in the body of the School Medical Officer's Report.

All cases of infestation, however slight, should be recorded.

The return should relate to individual pupils and not to instances of infestation.

(i)	Total number of examinations in the schools by the school nurses or other authorized persons	...	...	...	...	...	...	29583
(ii)	Total number of <i>individual</i> pupils found to be infested...	...	...	...	...	...	...	6638
(iii)	Number of individual pupils in respect of whom cleansing notices were issued (Section 54(2), Education Act, 1944)...	...	...	...	...	...	...	—
(iv)	Number if individual pupils in respect of whom cleansing orders were issued (Section 54 (3), Education Act, 1944)...	—



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